
The Co-operative Model Town Society

**History, Planning, Architecture and Social Character
of an Indigenous Garden Suburb in Colonial Lahore.**

Thesis submitted in accordance with the requirements of the
University of Liverpool for the degree of Doctor in Philosophy by:

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December 2014.

Abstract

This thesis investigates the Co-operative Model Town Society Lahore; a town covering an area of around 2000 acres developed in the 1920's in the (then) suburbs of Lahore, capital of Punjab province in British India. The Town is a remarkable interpretation of Ebenezer Howard's Garden City ideals and the co-operative principles. However, the real significance of the town is it being a unique example of a co-operative garden town built by the local Indian bourgeois, majority of whom were forced to migrate due to the disturbances that followed after the declaration of independence to India and Pakistan in 1947. Despite the admiration and significance of the Town in the realm of pre and post-Independence Lahore, very little has been documented about it. Its formal documented history is non-existent while its original built environment, an excellent example to illustrate late-colonial architecture in the region, is diminishing rapidly due to negligence and reconstructions.

The aim of this research is the documentation of history, urban form, social character and architecture of the pre-independence Model Town. Consequently, through an analysis of its built environment this study intends to develop an insight into the colonizer-colonized cultural transfers, in particular, to the transformation of British town planning ideas in the colonies due to their interpretation by the local Indians under the influence of prevalent religious, cultural and social practices.

The research was conducted by the process of historical construction, whereby evidences from the documents and the built environment have been used collectively to develop the historiography of the town. The selection of primary material has been based on its availability as the documentary evidences are scattered across Pakistan, India and the UK. The built environment has been documented using the official drawings as well as on-site surveys and measurements where the original drawings are unavailable.

The Town has been analysed in a comparative setting with respect to contemporary urban, architectural and social trends and practices prevalent locally (both by the colonial rulers and the colonized natives) as well as global

movements, especially Western ideologies and perspectives and their retrospect local adaptations.

The documentation and analysis were used as a ground for four interpretative conclusions. The first conclusion elaborates on the need of urban historiography in Pakistan. The second conclusion interprets the Model Town in the realm of twentieth century urban planning in the region. The third conclusion elaborates on the colonial architectural styles. The fourth conclusion gives an insight into the Model Town with reference to western styled 'Indian' nationalism.

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Preface

My affiliation with Model Town Lahore goes back a long way. My Grandfather settled in the shops area of D-Block Model Town after migrating in 1948 from Chamba State. My father, six months old at the time of migration, grew up in the same area till leaving for his higher education to Peshawar while my paternal uncles and later their children still live there. Hence it is no surprise that my earliest memories are the cherished trips from my home, a faraway boring small factory town near Taxila where we lived due to my father's work, to the lively and bustling city of Lahore where my parents' families lived. These trips which usually lasted between five to ten days were filled with anticipation and were most joyfully planned. Usually they were intended for attending wedding ceremonies of first cousins or *Eid* celebrations. However sometimes there were unexpected visits, usually the outcome of sad occasions like illnesses or funerals. Nevertheless, just the thought of visiting Lahore meant vacation for me and my siblings.

Quite justifiably, most of the time in Lahore was spent playing with our cousins' children on the roads and sidewalks of Model Town. When some elder agreed to accompany us, we would go to the Model Town Park. Between the play times were the street food times, as buying lemon soda, *dahi bhally* (a dish made with water-soaked lentil patties and yoghurt served with sweet and spicy chutneys) and *gol gappay* (round hollow crisps filled with chickpeas and onions and served with a sour and spicy water made by mixing tamarind, tartaric acid and spices in water) from street peddlers and corner shops let us live our Lahori dream. (While the rest of the world eats to live, Lahoriyas are infamous for they live to eat due to their love of food. Source: It is a Universal truth, just ask any Lahoriya).

My paternal uncles lived opposite to the *Bhaiyya Kabab* shop (a famous food outlet), beyond which was the most mysterious building of the area, the *mandir* (Hindu temple). It was a curiously fascinating site for me as a child. Surrounded by a multitude of shops selling meaty delights, there was no direct entrance to the building itself until recently when it was included in a local primary school. However, it was clearly visible from our bedroom located on the second floor

and was an integral part of the horror stories that the elders told us to ensure that we did not attempt to wander there sneakily.

My attachment with Model Town grew stronger when my father decided to relocate back to Lahore after retirement in 1997. We settled in a first floor portion in H-Block, overlooking the main circular road. As a resident and a student of architecture the Town became a completely new experience for me. Its older buildings, the Club and the mandir, and its lavish landscape had always fascinated me but as a resident I was able to explore the area further with a different perspective. The resultant experiences were summarized for my various B. Arch projects in Urban Design and Conservation of Historic Buildings under topics like the *Trends of Commercialization in Residential Areas* and *Deteriorated Conditions of The Bungalows in the Model Town*.

After completion of my B. Arch and subsequently working as a junior architect in a private consultancy firm for a few months, I was offered a visiting teaching post in my alma mater, University of Engineering and Technology, Lahore, in 2003 which became a permanent post in 2004. I decided to pursue my PhD in 2006 and for the topic of my research for all my research proposals was Colonial Lahore. The choice was based on two reasons. (1) From the very beginning it was quite evident that Lahore has not been studied significantly unlike other colonial cities in the region. (2) I wanted to choose a topic which I was able to sustain and enjoy for the duration of my studies and what else could be more interesting than a study about hometown.

I relocated to the UK in December 2009 and joined University of Liverpool in January 2010 as a PhD researcher. The first three months were spent on understanding the environment of the city and the university together with understanding the basics of research. Meanwhile the School of Architecture finalized my PhD supervisor.

My earlier meetings with my supervisors Dr. Iain Jackson and Professor Simon Pepper greatly helped me in focusing my attention to this quaint town as an independent entity for my research. Model Town, due to its perfectly geometrical plan and resemblances to the Garden City Model diagram which stands in contrast to the rest of the city, is the most prominent residential area

on the Map of Lahore which was enthusiastically observed by both of them. This shared enthusiasm helped me in developing my research topic I started working on the project, *Model Town Lahore*.

Major parts of this study were carried out in the British Library London (St. Pancras and Colindale) and in Lahore during my three visits in February and June-July 2011 and February 2013 respectively.

This project has had its ups and downs due to prevailing political conditions in the city and unavailability of documents which were probably misplaced or destroyed in the events that followed the aftermath of partition of the Indian subcontinent in 1947. However, I am delighted that I could make it this far despite all the shortcomings. It was only possible due to the help and guidance extended by many great individuals and organizations. All the faults and shortcoming, however, are entirely mine.

Acknowledgements

This dissertation would not have materialized without the affection, cherish, generosity, guidance and extended support that I have received from many magnificent people and organizations during the course of my research. I would like to express my great appreciation for all of them. However, in particular, there are some whom I would like to thank specifically.

This study has been kindly funded by University of Engineering and Technology (UET) Lahore-Pakistan under its Faculty Development Programme (FDP). I am really grateful to the FDP Selection Board UET Lahore for giving me this invaluable opportunity.

I would like to thank the School of Architecture, University of Liverpool for their continued support during the course of my studies. My special thanks and appreciation are to my supervisors, Dr. Iain Jackson and Professor Simon Pepper, for their patience, constant support, encouragement and feedback which has been very crucial in the development of this study. Without their guidance this study would not have materialized. My sincere gratitude also goes to Professor Mark Swenarton and Dr. Carolina Stevenson for their invaluable advice. I am also thankful to Professor André Brown and Professor Barry Gibbs, for their positive support and friendly advice. Many thanks to staff at the School of Architecture, Marion, Craig and Chris, for their kind help.

My Library researches would not have been accomplished without the help extended by the kind staff at the British Library (St. Pancras and Collindale), Sydney Jones Archives, Donald Mason Library and Harold Cohen Library (University of Liverpool) and John Rylands Library (University of Manchester) for which I am very grateful to them.

A major part of my research relies on the records of the Co-operative Model Town Society (CMTS) Lahore. This would not have been accomplished without the support and help extended by Mr. Naeem Bari Bhatti Incharge Property, CMTS. I would like to thank him for allowing access to Society records as well as photographing the Club buildings and his invaluable time for discussions and guidance.

Advice given by my teachers and colleagues at UET Lahore has been a great help. I would specially like to thank Professor Muhammad Yusuf Awan, Professor Neelum Naz and Professor Rafiq Ahmed Malik for their guidance and invaluable advice. I am also grateful to Jawad Ahmed Tahir and Muhammad Saad Khan for access to drawings of their refurbishment project of Hafiz Jullundhry's House and contacts in the Model Town Society and Fatima Javeed for help in locating PWD documents.

I am particularly grateful for the assistance given by my friends in Lahore especially F'rah Mukhtar for help in on-site documentation, digitization and photography, Salleela Imran for acquisition of plans from Cantonment Board Lahore, Azib Bajwa for photographs of Krishen Nagar, and Muhammad Tariq and Faiqa Khilat for translating texts.

I would also like to thank Emmy Eustace, Jawad Zakariya and Tahir Iqbal for allowing me to use photographs from their personal collections, Catharine Twilly and Chloe Applin (Christ's College Cambridge), Vijayamma Unnikrishnan (Indian Institute of Architects) and Abdul Waheed and Naveed Anwar (Government College University Lahore) for invaluable information.

I came to Liverpool as a confused stranger and would have remained so without the guidance of my peers, especially Dr. Nick Webb, Dr. Muhammad Al Mayhoub and Dr. Ataa Alsalloum. Many thanks for the help and guidance. My special thanks to Dr. Junjie Xi for being an amazing friend and support.

I would also like to thank my family friends in the UK, Hashem and Tamima, Tariq and Ayesha, Arshid Bhai and Shahida Baji and Khalid Bhai and Irshad Baji for making this foreign land a second home for me and my family. Many thanks to Ayesha Inam for her hospitality in London and being my travel guide.

My family has been the core of my strength from the decision to undertake PhD to ensuring that I remain motivated enough to complete it. I am greatly indebted to my parents for giving me the freedom to choose my own destiny and active support throughout my life; my parents-in-law for their understanding and support; my sister Sana for being the best aide, friend and mentor; brother Mansoor and sister-in-law Wardah for encouragement, and my brother-in-law Ilyas for locating primary documents in Lahore. A special

thanks to my cousin Ar. Adil Nazir for inspiration to become an architect and locating documents from NESPAK.

My husband Mohsin has been a real witness (read: victim) to each stage of my PhD. I really don't have words to thank him for his encouragement, active support, cooperation and patience throughout this very demanding period in our lives. In the end, I would like to thank Hamza, my little champ, for the twinkles in his eyes and the sparkles in his smiles; for understanding that hitting the power button is not the appropriate way to get my attention and for settling for a tablet and not messing with my computer.

Once again thank you all. I am humbled and highly obliged by your contribution in helping me realizing my dreams.

Notes on transliteration and use of names

The context of this dissertation relies heavily on words and terminologies from local languages particularly Urdu, Hindi, Punjabi and Persian in order to create a better understanding. These include local names, building components and decorative features, types of places and buildings, legal terminologies and social groups. All such terms have been written in italics when used in the text for the first time except for the proper nouns or words that are well known in English, eg. Bungalow. These terms are defined with a parenthetical or bracketed remark, or by a footnote.

Many of these terms exist with different spellings even in the official government documents. When used in quotations, I have used the original spellings from the document. However in general use, I have used these spelling as they are used nowadays; eg. Punjab in lieu of Panjab or Panjaub, Anarkali instead of Anarkulli and Mian Mir for Meean Meer.

One important obstacle in the documentation of this dissertation was the confusion created by same names shared by two or more people, particularly when these names used initials for first name and a commonly occurring surname, Ram or Chand or Singh or Khan eg. J.B Sahni and B.J. Sahni. To cater for this I have used the complete name along with titles, eg. Bakhshi Tek Chand and Diwan Tek Chand, Sir Ganga Ram just to avoid confusion.

I have also used spellings for the names as preferred by the person themselves, hence using Diwan instead of Dewan for Diwan Khem Chand and vice versa for Dewan Chuni Lal. In the instances where people have their preferred pen names, eg. A. Hameed (Abdul Hameed) or Aijazuddin (Fakir Syed Aijazuddin) I have used them if they do not create any aforementioned confusion.

In case of people who have changed their names later I have used the name which was used by them before 1947, eg. For Freda Bedi who later converted to a Tibetan Monk and was renamed as Sister Palmo, I have used Fredi Bedi in the text instead of Sister Palmo.

Introduction



1-1 A Bird's Eye View of the Model Town Lahore

Photograph by: yj136 (pseudonym)

Panoramio.

2008.

CONTENTS	<p>Contextual Background</p> <p>The Research Domain - Model Town Lahore</p> <p>Aims and Objectives</p> <p>Research Questions</p> <p>Organization of the Dissertation</p> <p>Contribution to Knowledge</p>
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Contextual Background

The following description is a bird's eye view of the city of Lahore in order to understand the locational and historical context of Model Town Lahore.



Drawn by: Shama Anbrine

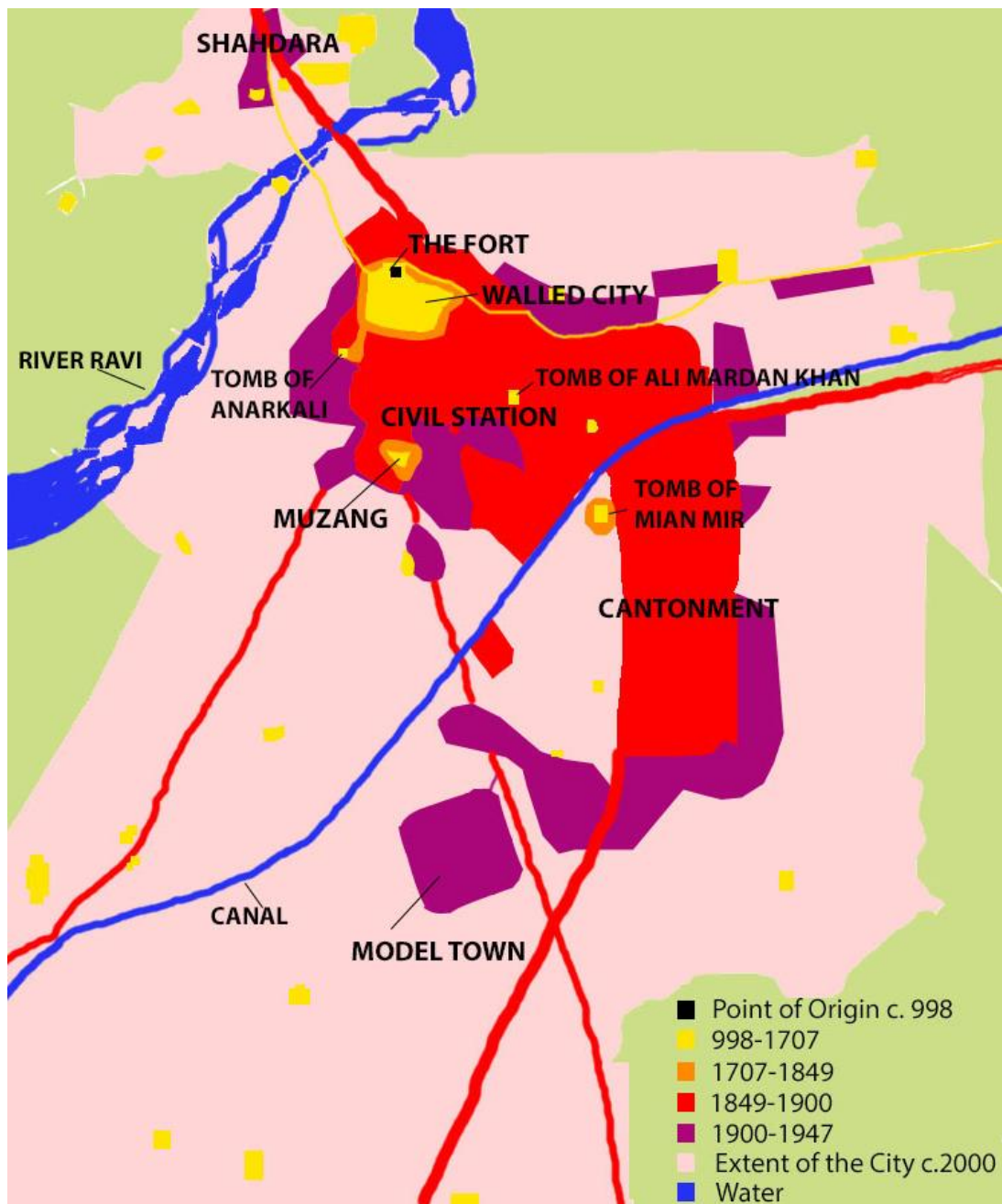
2013.

1-2 Location of Lahore with reference to major cities of the South Asia

Lahore is 349 miles from Delhi, 1,213 miles from Calcutta, and 1,306 miles from Bombay (by the Great Indian Peninsula Railway).¹ According to Street's directory, "Lahore may be reached by Steamer from Bombay to Kurrachee, thence by the Scinde Railway to Kotree and from Kotree by the Steamers of the Indus Flotilla, or other vessels to Mooltan, thence to Lahore by the Punjab Railway²."

¹ Rasheed, A. (1907). *The Travellers Companion* (Indian Railways). Calcutta: Superintendent of Government Printing. p. 155.

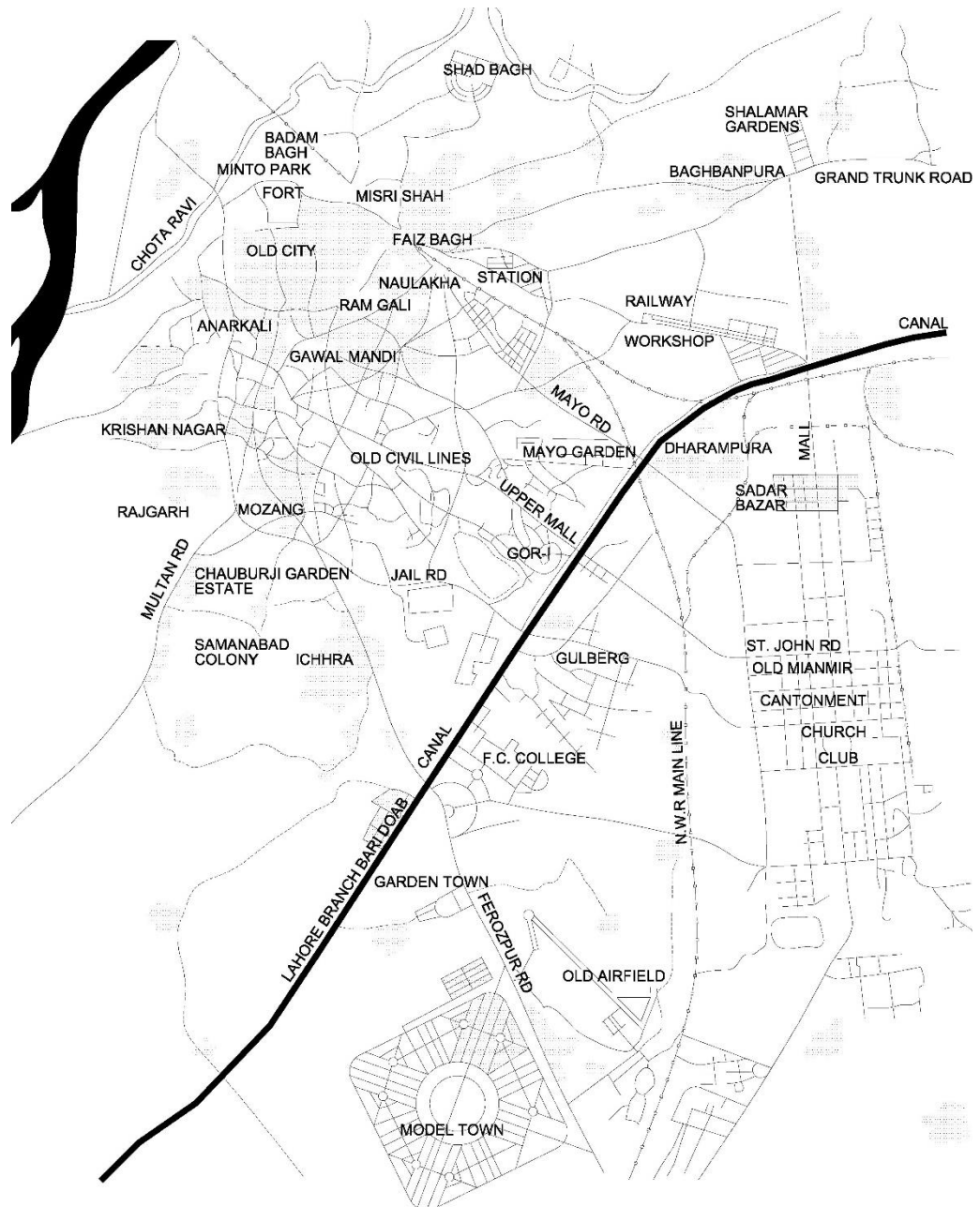
² Unknown Author. (1870). *Street's Indian and Colonial Mercantile Directory for 1870*. London: G. Street. p. 47.



Drawn by: Shama Anbrine

2013.

1-3 Historical Evolution of Lahore

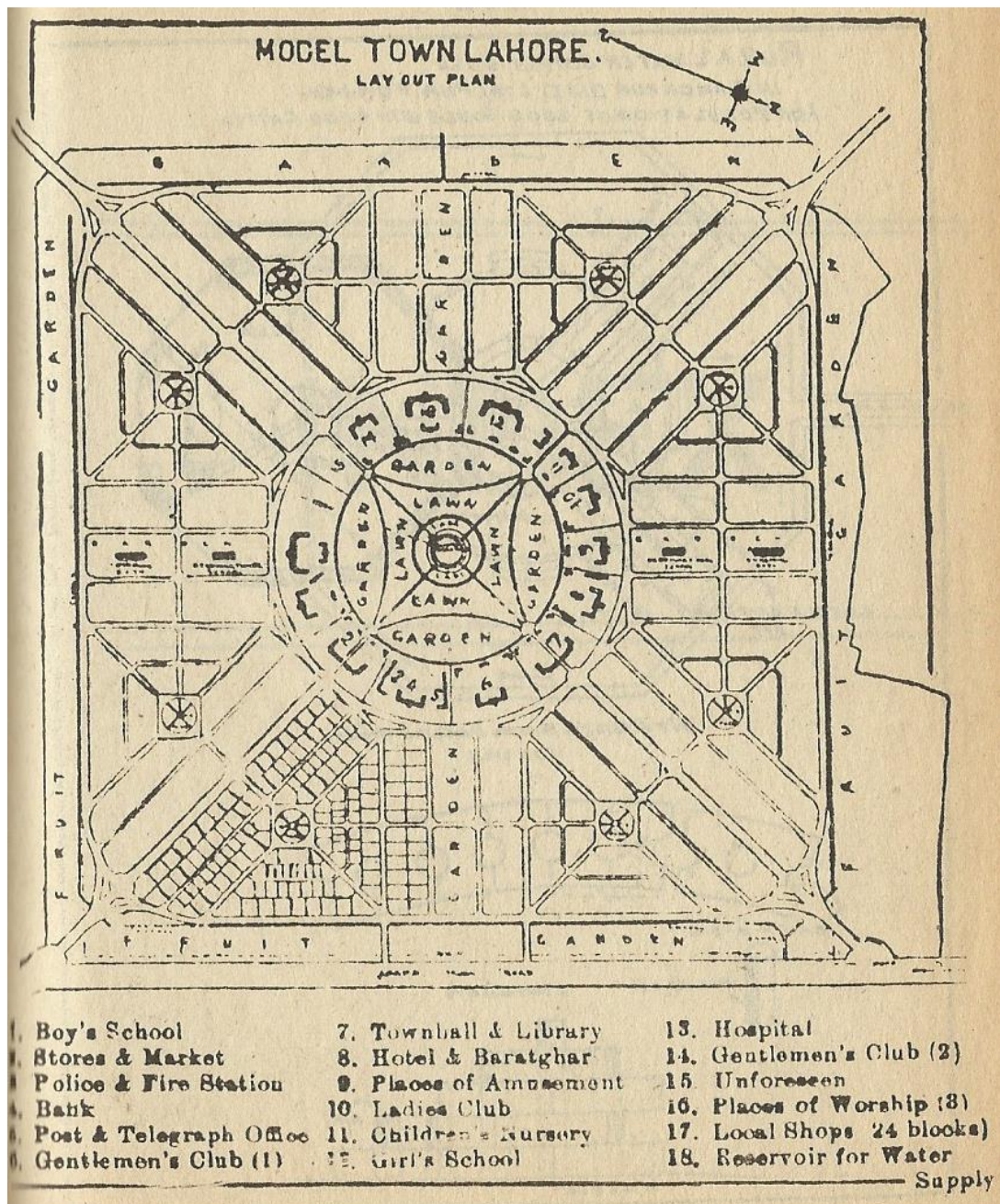


Redrawn by: Shama Anbrine after Grenfell Rudduck.

Rudduck, G. (1965). *Towns and Villages of Pakistan*. p. 12.

2013.

1-4 Major Areas Comprising pre-1947 Lahore



Drawn by: Unknown

Ram, G. (1927). *Pocket book of Engineering*. 5th ed. Lahore: Civil and Military Gazette Press. p. 837.

c. 1927.

1-5 Schematic Plan of Model Town Lahore

Brief History of Lahore and its Development

The city of Lahore, historically the capital of undivided Punjab in British India, is presently the capital of Punjab province of Pakistan; a country that came into existence when British India was divided into independent states in 1947. It has remained a prominent urban focal point for the people of Indus plain and surrounding areas throughout its history.

The origins of the city before the Muslim conquest are unknown³. While its name is attributed to Loh (or Lav) son of Hindu god Rama⁴, most likely it had humble beginnings as a mud fort constructed in c. 998 by Raja Jay Pal of Hindu Shahiya dynasty for protection against the Afghan invader Mahmood of Ghazna⁵. In c.1000 the mud fort was conquered by Malik Ayaz, the General of Mahmud of Ghazna⁶. As the fort was destroyed in the process, Ayaz rebuilt it and a city started growing in the vicinity⁷. The city gained importance during the Mughal times when Babur the founder of Mughal Dynasty built several royal gardens in its neighbourhood⁸. Later Mughal emperor Akbar made Lahore his seat of government⁹. He enlarged the Fort and constructed a boundary wall around the periphery of the city with thirteen gates¹⁰ while many Mughal courtiers built their gardens in the suburbs of the city¹¹. After the downfall of the Mughal Empire, the Sikhs took control of the province¹². During the Sikh times the city was reduced to its boundary walls owing to disturbances

³ Government of Punjab. (1884.) *Gazetteer of the Lahore District 1883-4*. Calcutta: Calcutta Central Press Company. p. 16.

⁴ Baqir, M. (1952). *Lahore, Past and Present: Being an Account of Lahore Compiled from Original Sources*. Delhi: Panjab University Press. p. 21.

⁵ Ibid. p. 22.

⁶ Ibid.

⁷ Ibid.

⁸ For details see Wescoat, J. and Wolschke-Bulmahn, J. (1996). *Mughal Gardens: Sources, Places, Representations, and Prospects*. Washington: Dumbarton Oaks.

⁹ Op. cit. ibid. pp. 47, 61.

¹⁰ Ibid.

¹¹ For details see Wescoat, J. and Wolschke-Bulmahn, J. (1996). *Mughal Gardens: Sources, Places, Representations, and Prospects*. Washington: Dumbarton Oaks.

¹² Op. cit. Ibid.

and security issues¹³. The tomb gardens built during the Mughal times were used by the Sikhs as military cantonments and similar development scheme continued during the British occupation (refer to 1-3 for details).

The British colonial rule lasted over the Indo-Pak subcontinent for nearly three hundred years. It started in 1612 as a right to the East India Company (EIC) for building a factory in Surat (in Gujarat) and later spread across southern, south eastern and north eastern parts of the subcontinent. In 1773, EIC established its capital at Calcutta and thus formally established its rule, popularly known as the Company rule or Company *Raj* [from Hindi meaning to rule or govern]. The north western part of the subcontinent, i.e. areas included in present Pakistan, came under the Company Raj in 1849 when the Sikh rulers were defeated by the British. However In 1858, EIC was disestablished and the British Crown took direct control of the governance of entire India.

Lahore was the natural selection as a capital and thus this city became a hub of all the major administrative infrastructure. Initially these services were administered by the British officers but when the inclusion of natives in superior government services was sanctioned by the Queen in 1870s, the city became the centre of education with the commencement of various colleges and a university. Lahore, thus, became the leading centre of education in North India, thriving with employment opportunities in civil services, legal, medical, engineering, commerce and teaching professions. By 1884, Lahore had acquired the reputation of being “Paris of the East” as it had become a fashionable city, where lifestyles, habits and customs of its people were considered most admirable¹⁴.

The British Raj in north-west India lasted for nearly ninety years which ended in 1947 with the division of British India into two independent states, India and Pakistan. The partition of British India was accompanied by the largest mass

¹³ Ibid.

¹⁴ This cliché of Lahore as “Paris of the East” has been used with reference to pre-independence Lahore by many recent authors. See Sidhwa, B. (ed.). (2005). *City Of Sin and Splendour: Writings on Lahore*. New Delhi: Penguin Books. p. xv. ; Neville, P. (2006). *Lahore: A Sentimental Journey*. New Delhi: Penguin Books. The earliest known reference of comparison of Lahore with Paris is mentioned in Government of Punjab. (1884). *Gazetteer of the Lahore District 1883-4*. Calcutta: Calcutta Central Press Company. p. 164.

migration in the history of the world where some 13 million people¹⁵ had to (or in most instances were forced to) leave their homes, their belongings and their lives and were relocated across the Radcliffe line¹⁶ in a new land where they had to start their lives from scratch. During this process, Punjab was the worst affected province as partition of British India was accompanied by the partition of this province among the two states. Thus *Panjab* (eastern part of the province) became a part of India and *Punjab* (western part) was included in Pakistan. As a consequence of this partition nearly one-third¹⁷ of Punjab's total population of 33 million¹⁸ was forced to relocate across the border.

Pre-independence Lahore was the political, social, economic, cultural and educational hub of Northern India¹⁹ with the 'native' population comprising a majority of nearly 65 percent Muslims, with a significant population of Hindus and Sikhs (35 percent) along with a small number of Buddhists, Jains and Christians²⁰. However, it was this sizeable minority comprising of Hindus and Sikhs who were more affluent and accordingly had a visible footprint on the built environment of the city.²¹ Although they left as a consequence of partition, their footprints still adorn the city telling the tales of their departed residents, the stories of abandonment, and the processes of reacquisitions and rehabilitations.

¹⁵ Bates, C. (2007). *Subalterns and Raj: South Asia since 1600*. Oxon: Routledge. p.179; Ian Talbot (2007). A Tale of Two Cities: The Aftermath of Partition for Lahore and Amritsar 1947–1957. *Modern Asian Studies*, Vol.41: pp 151-185.

¹⁶ The border between India and Pakistan, named after its architect Sir Cyril Radcliffe who finalized the border line on August 17, 1947.

¹⁷ Bates, C. (2013). *Subalterns and the Raj: South Asia since 1600*. p. 79.

¹⁸ Ibid.

¹⁹ There are many significant works which have explored pre-independence Lahore. Notable among them are Sidhwa, B. (ed.). (2005). *City of Sin and Splendour: writings on Lahore*. New Delhi: Penguin Books; Anand, S. (1998). *Lahore: Portrait of a Lost City*. Lahore: Vanguard Books; Nevile, P. (2006). *Lahore: A Sentimental Journey*. New Delhi: Penguin Books. Hameed, A. (2008). *Lahore Lahore Aye* [Lahore is Lahore] translated by Khalid Hasan. Lahore: Vanguard Books.

²⁰ Unknown Author. (1993). *The Partition of the Punjab 1947*. Vol. 1. Lahore; Sang-e-Meel Publications, pp. 335-6.

²¹ Op. cit.

The Research Domain-Model Town Lahore

The history of the built environment of the new towns developed during the early twentieth century, particularly the ones that later became parts of the new post-colonial countries, is still an under-researched topic despite the fact that they are a significant part of the world's most rapidly urbanizing areas. One basic reason behind this backlog has been the process of historiography itself, both by the colonial and post-colonial authorities, as a 'selective' procedure.

The colonial historiography, in general, emphasised and celebrated the contributions of the colonial administration to cityscapes and hence, there is abundant written and documented evidence about the Railway and Canal colonies, Civil Stations, Cantonments, Government Officers' residences and the Public Works in the form of official annual reports²². Many post-colonial researchers like Anthony King and Mark Crinson have stressed the British colonial planning regime and as a result the indigenous population has been effectively reduced to being a weak and repressed group incapable of thinking and helping themselves. This is clearly illustrated when the native towns were only documented as examples of bad town planning practices, congestion and unhygienic character.²³ However, when the native towns were being developed by the indigenous population beyond their traditional form, these significant contributions were overshadowed due to their inspirations from the West and thus ignored in the process.

Historiography of towns and cities in the new countries that emerged after the end of colonialism exists in a complicated realm of political and post-colonial identities. The official political history of the new country usually starts from the day it achieved its independence where the process of independence itself was not as simple as merely a change of government. In many cases, like the Indian subcontinent, it was accompanied by a huge displacement of population across a new border followed by extreme disturbances and

²² The Oriental and India Office Collections at the British Library London is a compendium of these extensive reports which were produced annually for all departments of the Government.

²³ Chopra P. (2007). Refiguring the Colonial City: Recovering the Role of Local Inhabitants in the Construction of Colonial Bombay, 1854-1918. *Buildings & Landscapes: Journal of the Vernacular Architecture Forum*, Vol. 14 (Fall, 2007): pp. 109-125.

bloodshed. So while the built environment stayed behind, its inhabitants changed with times and accordingly affected how its history was perceived; those who were the founders of the town left (or were forced to leave) and in the process they took with them the oral histories and memories of the origin of these towns; in the absence of any documented evidence those who stayed behind inconsiderately took credit of the foundation and development of the town and the new settlers adapted the towns to suit their own needs and desires oblivious to the original ideologies behind the inception of these towns.

These towns are also at a disadvantage when it comes to official patronage because they get overshadowed by more 'historically significant' areas in the vicinity; i.e. the areas which are considered more important by the current regime and the international agencies. Consequently there is a historical 'amnesia' associated with these towns. The history of these towns, their origin and development, can be seen as suspended between remembering and forgetting, or what someone has *considered* worth remembering or 'over remembering' at the cost of other significant events which have been forgotten.

Model Town Lahore is one such fine example; a Town which still exhibits the memorabilia of its bygone residents in the form of its built environment, however, its history has been lost in time and space. The Town was conceived by Diwan Khem Chand, a British qualified local barrister, as solution to housing shortage faced by the city of Lahore in the early twentieth century. Built on the Garden City model, the Town's core ideals elaborated upon an 'Ideal Self-contained Garden Town'²⁴ and 'a town with all the conveniences of modern times'.²⁵ The residents of this Town were brought together from all over the Indian subcontinent regardless of their creed or ethnicity with one common denominator; they were 'middle class men'²⁶ whose incomes were fixed and who by 'virtue of their better training, education and social position desired to live a better life'.²⁷ Ultimately, the Town aspired to provide them all with

²⁴ Chand, D.K. (1922). *The Model Town*. Part 1. Lahore: Punjab Central Press. p. 2.

²⁵ Ibid.

²⁶ Ibid. p. 1.

²⁷ Ibid.

‘cheaper, cleaner and more comfortable houses’ where they would be able to lead ‘better, healthier, happier and longer lives’²⁸.

Model Town Lahore has been extensively admired for its urban planning, development on the cooperative lines and the urban ambience from researchers, government officials, critics and its former and present residents alike. The praises are endless for this novel experiment. Some regard this Town as a “disciplined flight of imagination that is the dream of architects and town planners”²⁹ and “a remarkably faithful reproduction of Howard’s progressive ideal---more faithful, perhaps, than Howard himself would have attempted”³⁰. Others have considered it to be “the most ambitious and far-reaching scheme of housing on co-operative lines in India”³¹, “a place, the like of which had never been and will never be seen again”³² and “a fine city [which] many Anglo-Indians thought [to be] the finest in India”³³.

While it was designed as a suburban town, today after almost ninety years of existence Model Town has become a central part of Lahore as a result of expansion in the sprawl of the city in the post-independence years.

Factors behind the Idea of a Model Town

The idea behind the development of Model Town flourished in the realm of colonial Lahore and accordingly the prime factors behind this design concept were the prevailing social and living conditions in the city as well as the Indian subcontinent.

²⁸ Ibid. p. 2.

²⁹ Vandal, P and Vandal S. (2006). *The Raj, Lahore and Bhai Ram Singh*. Lahore: NCA Publications. p. 81.

³⁰ Glover, W.J. (2007). *Making Lahore Modern, Constructing and Imagining a Colonial City*. Minneapolis: University of Minnesota Press, p. 154

³¹ 26. Darling, M.L. (1928). *The Punjab Peasant in Prosperity and Debt*. 2nd ed. London: Oxford University Press. p. 278.

³² Tandon, P. (1968). *Punjabi Century 1857-1947*. London: Chatto and Windus. p. 236.

³³ Morris, J. (2004). *Stones of Empire Buildings of the Raj*. Oxford: Oxford University Press. p. 205.

A Garden City in Lahore before Howard's times

Like all colonial cities, the British expansion of Lahore did not intervene in the inner or walled city areas³⁴. Instead they converted the moat outside the City wall into a circular road and located their developments at a considerable distance from the City. These developments which covered approximately ten times of the area of the old city came in the form Mian Mir Cantonment and the Civil Station (1-3, 1-4). Their planners, comprising of military engineers and officers, have celebrated these establishments as the transition of the City from ancient to modern times³⁵. These extensions presented wide regular streets, palatial bungalows, majestic public and educational buildings and vast open green spaces which stood in a stark contrast to the organically developed inner city areas characterised by narrow meandering streets adjoining tall compact houses and bazaars.

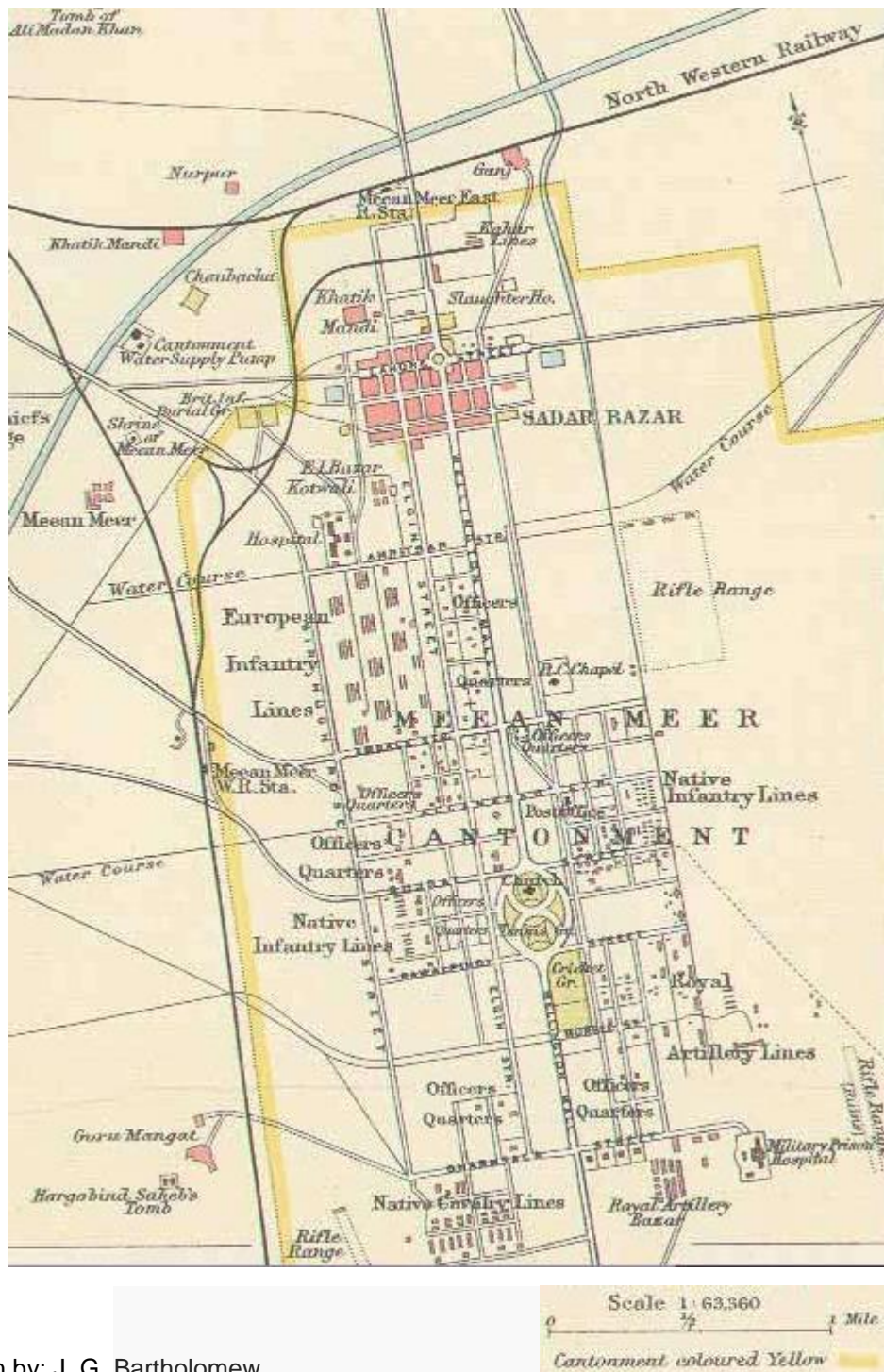
The ideology behind these developments is similar to urban planning in all the colonial cities whereby *the Colonial governors and ruling elites often sought to express their political authority through the physical form of the ports and towns*.³⁶ However the resultant planned towns in case of Lahore also demonstrated the prospects of experimentation with urban forms and social organization. For example; The Mian Mir (Lahore) Cantonment (built in 1850), 1-6, was not limited to soldiers' barracks and officers' bungalows. It also contained several acres of *soldiers' garden' containing shady walks, parterres of flowers, cricket field, swimming bath, gymnasium, Ball-and-Racket courts, workshops, skittle-grounds, a reading room and a library, with access to low-cost non-alcoholic beverages on site*³⁷. This experiment was novel and accordingly received high praise as Col. Hodgson has written:

³⁴ The 'White Town' and the 'Black Town' have been two distinct parts of any colonial city. For details see Wheeler, J.T. (1884). *Early Records of British India: A History of the Settlements in India*. London: Curzon Press. pp. 49-53.

³⁵ Government of Punjab. (1884). *Gazetteer of the Lahore District 1883-4*. p. 164-5.

³⁶ Home, R. of plabting and planning, p. 3.

³⁷ Hodgson, J.S. (1851). Mortality of European Soldiers in India. *The Calcutta Review*. Vol. 16. p. 56.



Drawn by: J. G. Bartholomew

Constable's 1893 Hand Atlas to India. Plate 43.

c. 1890

1-6 Plan of Mian Mir Cantonment

This [Mian Mir Cantonment] we believe is the only instance of its kind in India; but we venture to predict that it will be taken as a model for similar establishments, as soon as the truth becomes apparent, that in order to preserve our European soldiers in good health, and prevent the slow but certain diseases produced by drink, indolence, and dissipation, we must provide something beyond the parade ground and canteen.³⁸

Mian Mir was designed as a self-contained town much before Howard's times. However the area in its physical ambience strikingly resembles a Garden city as observed by Australian Architect Grenfell Rudduck in 1965 as '*a Garden City built half a century before this concept of planning became popular in England*³⁹'. The establishment of Mian Mir Cantonment paved path for similar developments in the city which were initially restricted to Government Housing and associated allied facilities. Later, though, the indigenous housing was also influenced by these ideals as evident from development of the Model Town.

Geddes and Lahore

The idea of Howard's Garden City was formally introduced to Lahore by Patrick Geddes (later Sir) who visited Lahore in 1916-17 upon invitation from the Government of Punjab⁴⁰. His report, a critical compendium of recommendations for improvement of various parts of the city and its surroundings, is regarded as a pioneer study relating to the urban character and problems in the city of Lahore. One important aspect of this report was developing a strategy for improvement of the condition of existing areas of the city with a view on possible expansions. According to Welter and Whyte,

"In Lahore he [Geddes] intends to create a green space, with playgrounds crowned by a temple on a hill in the park, thus dominating the city".⁴¹

³⁸ Ibid.

³⁹ 47. Rudduck, G. (1961). *Towns and Villages of Pakistan, A Study*. Karachi: Government of Pakistan Planning Commission. P. 118.

⁴⁰ Geddes, P. (1917). *Town Planning in Lahore: A Report to the Municipal Council*. Lahore: Commercial Print Works.

⁴¹ Welter, V. M. and Whyte, I.B. (2003). *Biopolis: Patrick Geddes and the City of Life*, 311.

For this purpose Geddes had compiled a series of city surveys, plans of which were displayed in the Lahore Council Chambers⁴². He had ‘*naturally*’ anticipated that “*the finest Garden Suburbs of all India, and perhaps, therefore of the world*” should ideally be located in Lahore⁴³ owing to the city’s rich history of royal gardens. Keeping this in view, his report while primarily focussed on ‘conservative surgery’⁴⁴ of the existing city areas contains a short segment where he has discussed the potential Garden city in Lahore, not in essence but in location. In his guidelines for future development of the city he stated that he was shown the site for a garden village about which he commented:

South of this⁴⁵ and also of the great Storm water Channel, we have an attractive area, practically in the country, to which I was taken to visit the beginnings of a Garden Village, near Nawankot. When included within the city boundary, and thus given protection, water supply, etc., this village may be expected to grow much more rapidly than hitherto⁴⁶.

When the description is mapped on a plan of Lahore, it points towards the area of Rakh Kot Lakhpat which was later selected as the site of Model Town. An important aspect to note in this instance is the date. Geddes’ report was dated 1917 while the idea of Model Town was not floated until 1919 and the actual site was selected in 1920. However, the people involved in the site selection (see next chapter for details) were mostly government engineers and it is quite probable that they were well aware of these surveys and thus the site selected for the Model Town was based on his guidelines.

⁴² Ibid. p. 3

⁴³ Ibid. pp. 30-31

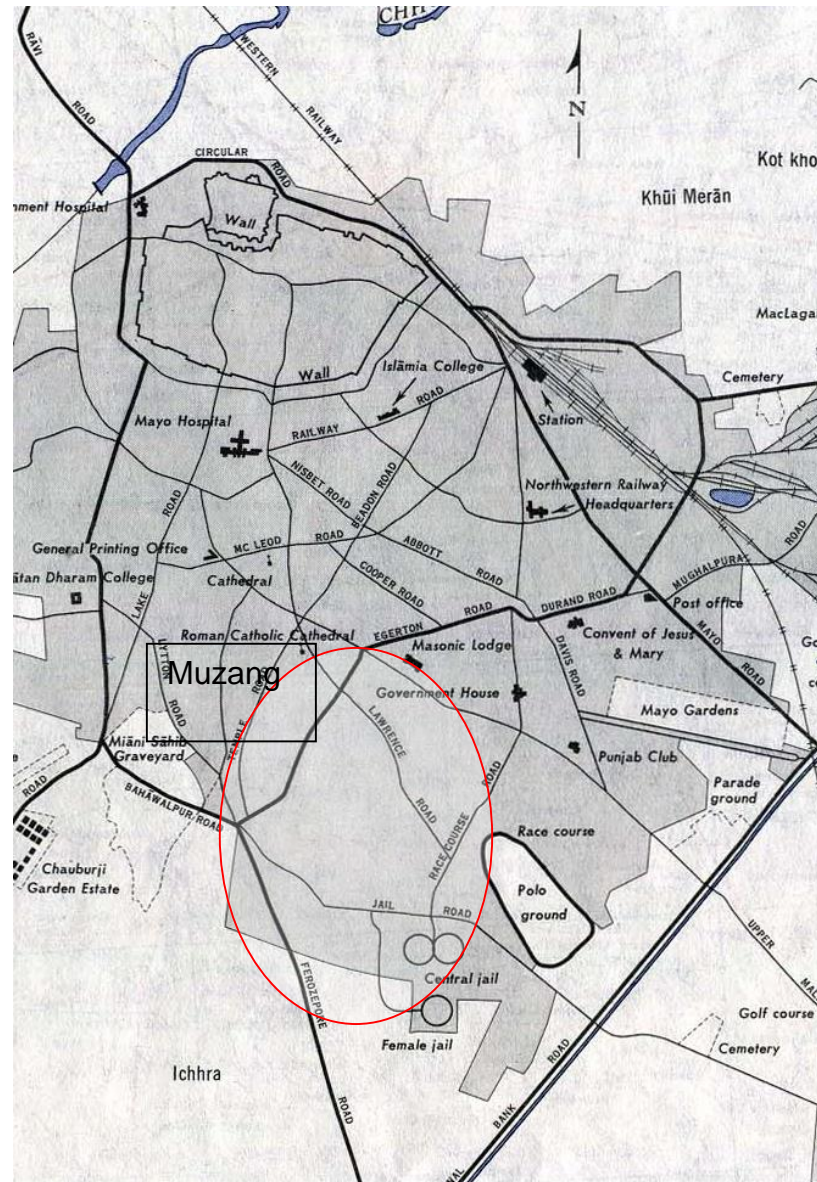
⁴⁴ Geddes’ idea of conservative surgery is an antithesis of urban development undertaken by the colonial administrators. While the latter preferred demolition of old structures to make way for new ones, the former aspired to combine the old with the new, protecting existing elements ensuring minimal damage and incorporating them in the new plan. Conservative surgery was also a means for creating better urban environment and allowing local inhabitants to voice their opinions for approval or disapproval of any change. For details see Hysler-Rubin, N. (2011). *Patrick Geddes and Town Planning*. Abingdon, Oxon: Routledge. p. 30.

⁴⁵ In previous paragraph he was discussing about Miani Sahib Cemetery, Muzang and Multan Road, see Geddes, P. (1917). *Town Planning in Lahore : A Report to the Municipal Council*, Lahore: Commercial Print. Works. p. 29

⁴⁶ Ibid.

Geddes' contributions in establishing a garden city in Lahore were not merely limited to this site selection process. The 1917 report also describes in detail about design of a Garden city in Lahore. According to the description:

A lay-out plan for the large district east of Muzang, between Ferozepore road and Lawrence road and the jail has been handed me; it seems on rural lines; yet with a day or two of work upon it, chiefly spent in study of the ground, I think this may be improved.



1-7 The Area between Ferozepore Road, Lawrence Road and the Central Jail.⁴⁷

⁴⁷ Modified from Lahore and Vicinity Map 1963 Accessed 22/03/2012 from http://www.lib.utexas.edu/maps/middle_east_and_asia/lahore_vicinity_1963.jpg

When plotted on map, this site corresponds to the area surrounding the Birdwood barracks. The central core of this site is the military barracks, covering an area of 22 acres and most of the area is post-1947 development. There is a possibility that Geddes was only able to plan the main circulation roads and demarcation of public buildings at the extreme ends of this area, rather than complete urban design due to sensitive nature of the military affiliated areas. Yet, there are not much available sources to confirm this hypothesis due to unavailability of any drawings by Geddes, which were lost and hence unavailable⁴⁸. On the other hand, it is highly likely that his ideas did not materialize at all, as had been the case in many other Indian cities where he was invited with enthusiasm to compile a survey, but later the officials did not implement his ideas due to his excessive criticism on the prevailing administration and planning practices⁴⁹.

It can be argued that Model Town was built on a site that was identified and approved by Geddes. However, in the absence of any drawing of the garden city planned by him, no conclusion can be drawn about his influence on the planning aspect of the Town.

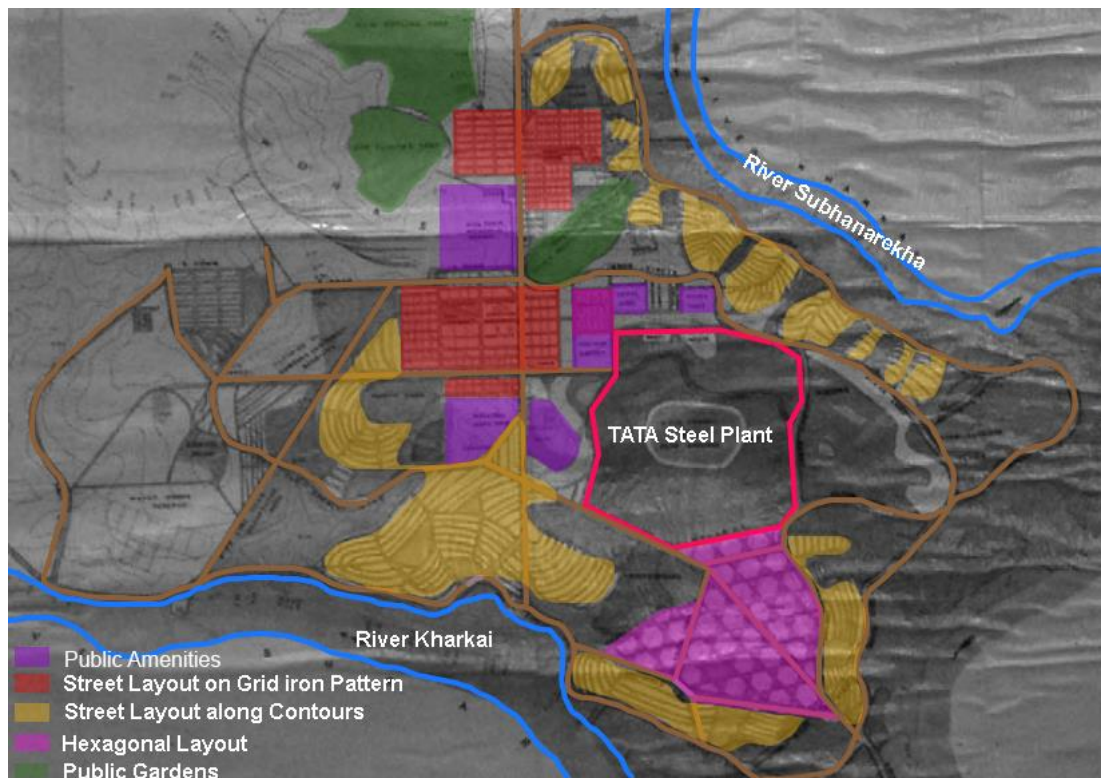
Garden Cities in other parts of India

Like other parts of the world, the turn of twentieth century saw development of garden cities across the Indian subcontinent. Notable among these included the industrial 'model towns' like Jamshedpur (1907) and Burnpur (1918) which were developed in west Bengal to cater for the accommodation needs of the employees of Tata Steel and Burn and Co. respectively. The imperial capital at New Delhi (1911) was also a major garden city project in the region.

Tata's industrial 'model' town at Sakchi (later renamed Jamshedpur after its founder Jamshedji N. Tata) was founded in 1907 to provide accommodation to the employees at the Tata Steel, the first modern steel plant in India.

⁴⁸ Stalley, M. (1975). *Patrick Geddes, Spokesman for the Man and the Environment*. New Brunswick, NJ: Rutgers University Press. p. xii.

⁴⁹ Home, R.K. (1997). *Of Planting and Planning*. London: Spon. p. 175-6.



Map Source: Tata Steel Archives as cited in Sinha, A and Singh, J. (2011). p. 269.

Text and shading superimposed by Shama Anbrine.

2014.

1-8 Extension Plan of Jamshedpur by F.C.Temple, 1920.

Jamshedji Tata narrated his vision for an ideal township in a letter to his son Dorab as:

Be sure to lay wide streets planted with shady trees, every other of a quick-growing variety. Be sure that there is plenty of space for lawns and gardens. Reserve large areas for football, hockey and parks. Earmark areas for Hindu temples, Mohammedan mosques and Christian churches.⁵⁰

This township materialised as Jamshedpur, the first complete residential development commenced, funded and constructed by the Indians, using local resources and labour with the help of foreign expertise in planning.⁵¹ Its initial

⁵⁰ This quote has appeared on numerous Tata websites and related articles verbatim. eg. <http://www.tata.com/aboutus/articlesinside/The-quotable-Jamsetji-Tata> and http://www.tatasteelindia.com/corporate-citizen/sustainability_05/page_03.htm

⁵¹ Lovat, F. (1919). *Iron and Steel in India; A Chapter in the Life of Jamshedji N. Tata*. Bombay: The Times Press.

plan was designed by American architects Julian Kennedy and Axel Sahlin on a grid iron pattern.⁵² In 1919, F.C. Temple, a PWD engineer, designed an extension plan of the town on the lines of a garden city under the guidance of Patrick Geddes, 1-8.⁵³ Accordingly as early as 1919 the town exhibited:

Street after street of commodious one-storey brick houses, all well ventilated, all supplied with running water and lit by the electric light. Many of the houses possessed electric fans. The larger bungalows, built for the use of the European staff, stood in the midst of garden plots. The streets were wide and well-made, and were planted with trees. In the centre of the town was a spacious recreation ground... There was a bazaar containing both European and Indian shops. Institutes had been provided for both European and Indian workmen. A court-house, a post and telegraph office, and a police station were among the adjuncts of this extremely modern town.⁵⁴

Hence Jamshedpur became a benchmark for the development of techno-scientific modern urban residential towns inspired by the garden city movement.

The Colonial government initiated the ambitious plan of a new Indian capital at New Delhi in 1911, 1-9, designed by British architects Edwin Lutyens (later Sir) and Herbert Baker (later Sir). The new capital designed on the garden city model had both political and administrative motives. It was designed 'not merely as a shrine of the glory of India'⁵⁵ but was also to be 'the living centre of administration'⁵⁶

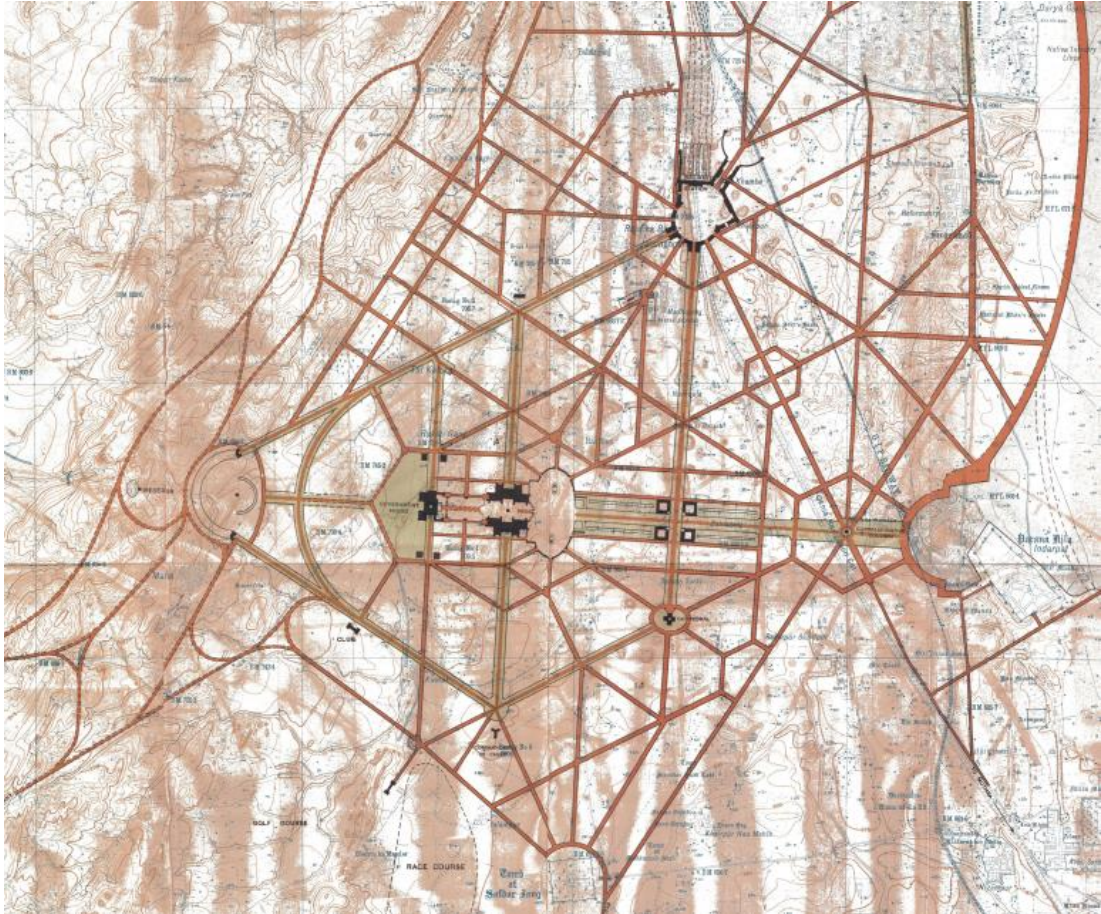
⁵² Sinha, A and Singh, J. (2011) Jamshedpur. Planning an Ideal city in India. *Journal of Planning History*. 10(4). pp. 268-270.

⁵³ Ibid.

⁵⁴ Op. cit. p. 64.

⁵⁵ Herbert Baker as reported in (1912) *British Architect*, Oct 11. p. 246

⁵⁶ Ibid.



Source: First Report of the Delhi Town Planning Committee. London: HMSO

1913.

1-9 A map of Edwin Lutyens' projected "Imperial Delhi" 1913.

Hence the resultant design was aimed at imprisoning the spirit of British sovereignty in its stone and bronze as well as exhibiting a '*sculptural monument of the good government which India, for the first time in its history*⁵⁷ had enjoyed under the British rule by blending '*the best element of the East and the West.*'⁵⁸

⁵⁷ Ibid.

⁵⁸ Ibid.

In short, the garden city tradition was well-established in the Indian subcontinent by the time the planners of the Model Town Lahore initiated their ideal suburban development. The need for a new town was, however, strongly guided by the local housing shortage and the sanitary conditions of the inner city areas.

Housing Shortage in Lahore

The Colonial Government introduced the concept of official residential provision for its in-service employees. For this purpose, the Government strived to provide residences to all the gazetted officers and professionals working for the Government in the Cantonment and the Civil Station. These residences comprised of palatial bungalows which existed in secluded clusters according to their departmental proprietorship. Accordingly their sizes and facilities varied with the Grade⁵⁹ of an officer and similar Grade bungalows were grouped together.

In the subcontinent the Government was always facing shortage of these bungalows. Hence, whenever there was a vacant bungalow there was a competition between the officers to get its possession. The situation in Lahore was no exception where the “European and superior Indian elements” had “raced neck and neck” for any bungalow that fell vacant, “the honours sometimes falling to one and sometimes falling to other.”⁶⁰ Anna Booth Stratton, wife of Professor Alfred William Stratton at Government College Lahore, described her experience of acquiring a house in one of her letters:

The rent is paid, and I send you the receipt. Mayo Lodge is still unoccupied. So is Trinity House. S—S— at the last declined to take it, and secured first chance of the house we are to love. It is Dawson's on Abbott Road, opposite

⁵⁹ The term Grade refers to the rank of a Government employee according to the pay scale and thus is also termed as BPS (Basic Pay Scale). Grades range from 1 to 22, where 1 is the lowest. Grade 1 includes Sweepers, Grade 2 Peons, while the rest are different cadres of clerical staff. Officer Grades start from 17 and go up to 22, also known as Gazetted officers, as they are authorized to attest documents.

⁶⁰ By Own Correspondent. (1922). Lahore House Shortage. *The Times of India* [Bombay]. 19 May. p.7.

the Morses'--- a little house just our size and most to our liking of all that we have heard is available. Dawson is moving out to-day. We go in at once.⁶¹

Similarly, when some bungalows in the Civil Station were allowed to be converted into military offices, there were complaints in a local newspaper as:

It may interest those who have been clamouring for house accommodation to learn that no less than five bungalows opposite the Chief's College have been taken over by the Military Accountant. It is surprising in view of the difficulty which exists in finding residences for Government officials that houses in the best part of Civil lines should have been taken over as offices.⁶²

Sir Edward Maclagan, Governor of the Punjab (1921-1924), also addressed this issue of housing shortage clearly acknowledging that a large class of gentlemen in Lahore wished to live in 'some sort of comfort in modern bungalows with modern appliances' and the demand was so high that it was nearly impossible for private enterprise in Lahore itself or in the civil station 'to keep pace with this demand, or to provide houses at a reasonable rent.'⁶³

The problem of housing was not limited to the in-service personnel of the Government but also extended to the retired ones. The British officers' returned to homeland after retirement, however, the local officers faced extreme difficulties. The first generation of local professional men naturally anticipated return as respected elders to their native villages or hometowns after retirement. However, for the second generation officers, the return back home for post-retirement living was not that easy as this generation comprised of the people whose parents' had experienced government servants' life. Hence they had been raised away from their background since early ages in government officers' residences with a lifestyle similar to the British officers' children and later as the officers themselves.⁶⁴ The native towns were not

⁶¹ Stratton, A.W. and Stratton, A.B. (1908). *Letters from India*. London: Archibald Constable and Co. p.253.

⁶² By Own Correspondent. (1919). House Accommodation in Lahore. *Civil and Military Gazette* [Lahore] 17 Dec. p.9.

⁶³ By Own Correspondent. (1924). Lahore's Model Town, Foundation Stone of First Building Laid. *Civil and Military Gazette* [Lahore] 12 April. p.10.

⁶⁴ Tandon, P. (1967). *Punjabi Century*. p.236.

comparable to Lahore due to lack of basic facilities, ambience and lifestyles. Visiting their native village for a short duration might have been their concept of a good vacation but it was undeniably not a preference for permanent settlement. They perceived that by their better training, education and social position they deserved better living conditions. Therefore this class sought after a pleasant place for settling down in order to spend their retired lives. Under these circumstance, Lahore was an ideal choice. However, it was nearly impossible for middle class people whose incomes were fixed and limited to buy a house for themselves in Lahore owing to high price of land⁶⁵.

Sanitary Conditions of Inner City Areas of Lahore

The poor health and sanitary conditions and high population density in the late nineteenth and early twentieth century in the inner city areas of Lahore were quite catastrophic. Diseases⁶⁶ like cholera, small pox, plague, fevers (like malaria, typhoid, influenza, relapsing fever and enteric fever), dysentery and diarrhoea and respiratory diseases, erupted as seasonal⁶⁷ epidemics and consequently contributed to a high mortality rate. Serious plague epidemics⁶⁸ outbreaks were reported in 1897, 1901, 1903 and 1907 consummating thousands of lives⁶⁹.

⁶⁵ Chand, D.K. (1922). *The Model Town*. Part I. p. 2.

⁶⁶ Government of Punjab, Medical Department. (1870-1920). *Reports on the Sanitary Administration of the Punjab*. Lahore: Government Publishing.

⁶⁷ Plague, for example erupted in spring and early summers or March to May. See Advisory Committee for Plague Investigation in India. (1910). *Report on Plague Investigations in India*. p. 527. Fevers were more common in summers and diarrhoea in summers and monsoon. See Government of Punjab, Medical Department. (1870-1920). *Reports on the Sanitary Administration of the Punjab*.

⁶⁸ The epidemic season in Lahore was during spring season (March to May), and the mortality rate started when the temperature was between 40°F, and unlike other cities like Bombay and Nagpur, required higher temperature to decrease the plague mortality, that is, 90°F instead of the normal temperature range of 80° to 85°F. The main reason for this is that the rapid increase in temperature during these months is countered by the large diurnal difference in temperature due to which there are quite some hours especially in early mornings, late evenings and night every day when the temperature is below the mean average temperature. See Advisory Committee for Plague Investigation in India. (1910). *Report on Plague Investigations in India*. p. 527-528

⁶⁹ Government of Punjab, Medical Department. (1870-1920). *Reports on the Sanitary Administration of the Punjab*.

High mortality rate, however, did not decrease the population as Lahore was one of the densely populated cities of Punjab. The birth rate in Lahore was 34 per *mille* and population density 347 per mile in 1921, making it the eighth largest city of Punjab⁷⁰. Natural increment was not the primary method of increase in population of the city. People from other cities were continuously emigrating towards Lahore for seeking education, better living, or as a result of transfers of government officials, making emigration a major cause of this increment.

Colonel Forester, a PWD engineer responsible for sanitary administration of Punjab, in his report 'Town Planning in Punjab' expressed his concerns for sanitary conditions and uncontrolled expansion of Lahore as:

these subjects demand immediate consideration because the towns are 'walled towns'; they have become hopelessly overcrowded, they give an increasing death rate from tuberculosis and other respiratory diseases, their suburbs are growing up indiscriminately and unhygienically and perpetuating all evils of the original towns, their drainage and water supply problems are hopeless, or where solution is available that solution is needlessly expensive and the suburbs as soon as they come into existence are fitting subjects for the improvement schemes.⁷¹

Hence there was a dire need of adequate and better housing. The Government alone was not capable of catering for its need and desperately required private intervention.

Co-operation and the Concept of Co-operative Societies

Within the Colonial Government the general perception prevailed that the Indians exhibited 'far too great inclination to rely upon the *Sirkar* [Government] and too small determination to rely upon self-help'⁷². Under these

⁷⁰ Ibid.

⁷¹ By Own Correspondent. (1920). Town Planning in Punjab. *Civil and Military Gazette* [Lahore]. 20 Feb. p.7.

⁷² Sir George Barnes as quoted in By Own Correspondent. (1919). Government Help. *Civil and Military Gazette* [Lahore]. 16 Dec. p.19.

circumstances, they were thought incapable of resolving this issue themselves as expressed by as senior British politician.

The Government could do, and would do, something to help, but it cannot supply individual energy and individual determination to succeed⁷³.

The answer to encourage self-reliance was found in the Government-led initiative of the co-operative societies. The 'Co-operative Societies in Punjab' were introduced to develop the habits of self-help, mutual help and thrift among the local population to improve their economic condition⁷⁴. Among other things it actively encouraged 'better living and moral improvement'.⁷⁵

This scheme was officially initiated in 1904 with the introduction of Co-operative Credit Societies Act 1904. However, many government officers were encouraging this practice for agricultural credit societies in Multan (Punjab) as early as 1892⁷⁶. Notable amongst them was Mr. Maclagan, later Sir Edward Maclagan, who became the Governor of Punjab in 1920 and under whose patronage Model Town Lahore was initiated.

The Co-operative Credit Societies Act 1904 was a flexible legislation. Its primary aim was:

'...to lay down merely the general outlines and to leave the details to be filled in gradually, on lines which the experience of failure or success and the natural development of the institutions may indicate as best suited to each part of the country. So far, therefore, as it dealt with the constitution of the societies, the provisions of the Act were confined to those general principles which ALL Co-operative Societies must accept as the conditions of being permitted to enjoy the advantages afforded by special legislation.'⁷⁷

⁷³ Ibid.

⁷⁴ Punjab Co-operative Department. (1945). *Consolidated Circulars of the Co-operative Department*. Lahore: Superintendent, Government Printing. p. 4.

⁷⁵ Ibid. p. 21

⁷⁶ Wace, F.B. (1939). *Report on the Co-operative Movement in the Punjab 1939*. Lahore: Superintendent Government Printing. p. 2.

⁷⁷ Government of India resolution as stated in Calvert, H. (1925) *The Size and Distribution of Agricultural Holdings in the Punjab*. Lahore: Civil and Military Gazette Press. p. 182.

The flexible nature of this legislation had several advantages. It allowed people from different socio-cultural backgrounds to formulate their own co-operative societies with their own rules and regulations (discussed later in detail).

Colonialism, Modernity and the Need of Self-actualization

As discussed earlier, it is a common perception that the colonial rulers and western architects shaped the colonial cities. In this process, the colonized native communities have largely been ignored as they were not deemed capable of progressive thinking, modernization and adoption of new technologies.

In many cases this was in line with their observation of a common uneducated colonized native. Adoption of technology for a common man was not an easy task mainly because it clashed with the financial interests of the people who were used to manual labour to earn a living. In order to compete with technology, they had to work harder and think of new ways to discourage other people from its adoption. In case of India this was, perhaps, best illustrated in the Bollywood film *Naya Daur* [New Era] (1957). In the background of a small town which was often visited by pilgrims, *tongawalas* [horse cart drivers] decide to make an exclusive new road to travel faster when a rich businessman initiated a new omnibus service. While the hero, a tongawala, declared it to be “not a battle between rich and poor” and being “a fight between hand and machine”, the overall theme of the movie clearly illustrated the omnibus, a technological advancement, as taking the bread away from the poor by the rich capitalist class in lieu of its obvious advantages as a provision of comfortable and shorter journeys. Since these people were a majority, the common perception about the colonized natives has generally ignored the relatively small but influential Indian bourgeois’ class; a class that readily embraced *colonial modernities* and modern education, English language and western life style, and consequently tried to overcome the barriers of linguistic communication with their foreign rulers. In a country with a complex and varied cultural, religious and linguistic stratification the adoption of English language gave rise to two broad social classes among the indigenous population. The distinction was simple; those who adopted the educational system, and those who did not. The resultant was a “middle class” comprising of “men with little

more than formal education and learning abilities”, and a “working class”. The elite among this middle class were the people who would sit in the I.C.S⁷⁸ examination, join the I.M.S⁷⁹, or acquired professional degrees to become Surgeons, Doctors, Engineers, Lawyers, to name a few. Amongst them the foreign qualified were thought to be superior than the local qualified which

In many ways, [was] the culmination of an Indian middle class trajectory where formal education and ‘high’ culture colluded in emulating the canons of elite ‘English’ taste (or what we knew of it) and conforming to its customs and comforts ⁸⁰.

Regardless of their chosen profession, being part of the Government service ensured incentives and a job security not seen previously, satisfying what *Maslow’s Hierarchy of Needs theory*, 1-10, has described as their physiological and safety needs. The middle class learned and worked unquestioningly and obediently under the colonial rulers and with time became experts in their jobs, satisfying the next stage in their hierarchy of needs, the sense of belongingness to their profession.⁸¹ They had grasped the opportunity well and made a success of the chance afforded to them⁸². By the start of the twentieth century, after fifty years of colonial rule, they had become an integral part of colonial administration. Their achievements were acknowledged by the Government and the Queen by the British and local knighthoods, satisfying their need of self-esteem. When the first four needs were satisfied, the natural progression was towards the final stage, the need for self-actualization, 1-10; to make their own mark on their land; hence actively working for realizing the dream of a model town.

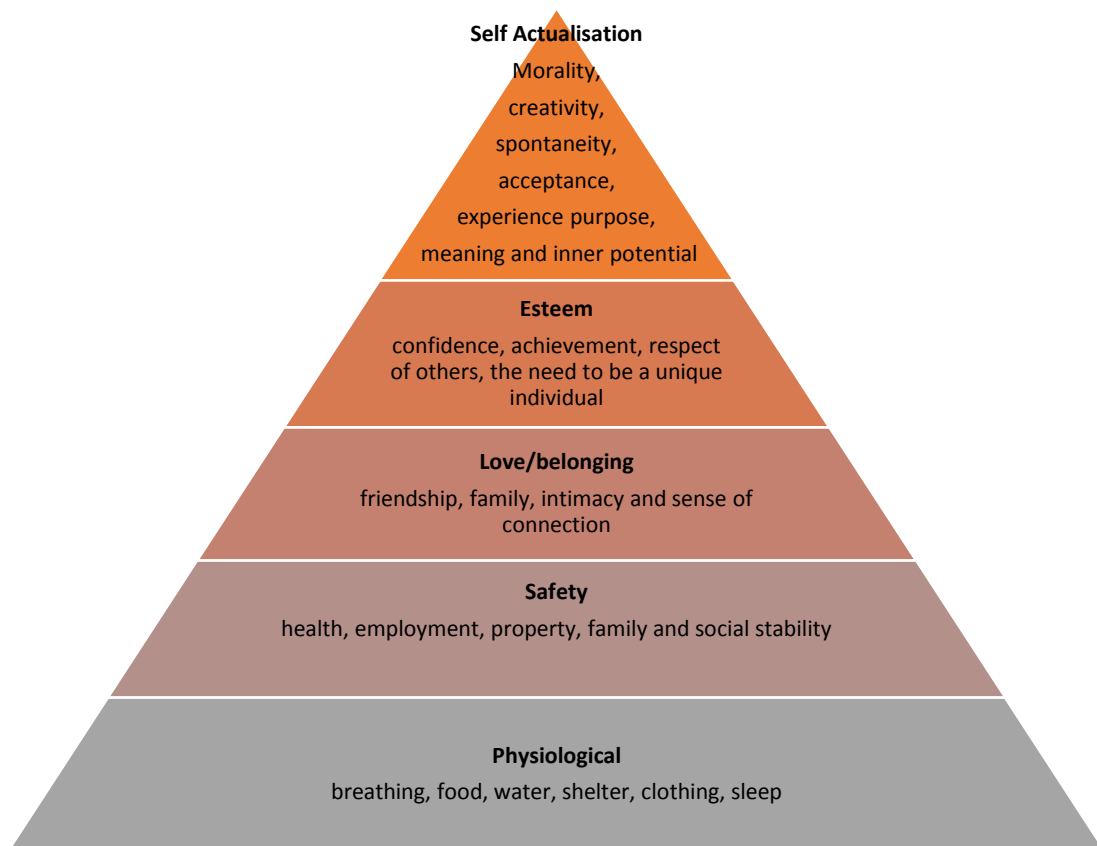
⁷⁸ Indian Civil Services

⁷⁹ Indian Military Services

⁸⁰ Bhabha, H. K. (1994). *The Location of Culture*. Oxon: Routledge. p. x.

⁸¹ Tandon, P. (1967). *Punjabi Century*. p. 196.

⁸² Ibid.



Drawn by: Shama Anbrine

Maslow, A.H. (1943). A Theory of Human Motivation. *Psychological Review*, 50, 370-396.
2014.

1-10 Maslow's Hierarchy of Needs Pyramid

In short, there was a serious housing shortage for the educated classes in Lahore at the turn of twentieth century. The idea of a Garden City and its similarity with the British developed residential areas of the city provided and excellent foundation for the development of a new indigenous town in Lahore.

Model Town Today

It has been nearly nine decades since the idea of a model town was conceived by Diwan Khem Chand. However, according to the present records of the Co-operative Model Town Society (CMTS), the pre-1947 history of the town is cropped in just two sentences as follows:

The Society was declared as Evacuee property in 1947 (after partition) as 85% of the plots belonged to non-Muslims who migrated to India.

At the time of partition, total Number of Members of Society were 1366, out of which 277 were Muslims & Christians and 1089 were Hindus, Sikhs.⁸³

These two sentences tell the sad story of the original residents of the town who were forced to leave their cherished homes as a consequence of partition of Punjab amongst independent states of India and Pakistan. At the same time they convey the message that nobody, especially in the CMTS hierarchy, is interested in preserving the historical records. Combined with rapid urbanization and land mafia which is storming the city of Lahore, the town is on the verge of losing its characteristic spaces. Its historical religious buildings, Hindu and Sikh temples, are now in a dilapidated condition after facing abuse at the hands of encroachers, **1-11**, **1-13**. Many of its original bungalows have been demolished to make way for new constructions, **1-14**. Its residential plots have been subdivided without any regulation giving ways to slum-like developments, **1-12**. Its green spaces are threatened by proposals of conversion into joy land and food streets.

Under these circumstances, there is an urgent need to document and conserve its history, architectural character and urban morphology as Model Town Lahore exhibits one of the unique examples of a town planning model developed by the indigenous communities in the region.

⁸³ History of Model Town Lahore. Retrieved 12/11/2013 from <http://mts.com.pk/history.aspx>



Photograph by: Amir Iqbal

Flickr.

2011.

1-11 Sikh Temple, *Gurudwara*, Model Town Lahore



Photograph by: Salahuddin Safdar

Pakistan Today, 29 September 2011.

2011.

1-12 E Block Quarters



Photographs by: Shama Anbrine

2011.

1-13 Hindu temple: *Mandir*, Model Town Lahore

Left: deteriorated structure, Right: The encroachments surrounding the building



Photograph by: Shama Anbrine

2012.

1-14 One of original bungalows of Model Town Lahore (Now demolished)

Current State of Knowledge and the Gap

There has been little documented about Model Town despite the fact that this area has attracted attention and praise both on map and in real life. Until now, five architectural historians have provided brief excerpts about Model Town. These include Anthony King⁸⁴, Masood Khan⁸⁵, Fakir Syed Aijazuddin⁸⁶, Pervaiz and Sajida Vandal⁸⁷, and William Glover⁸⁸. All these works have been written for a wider topic and the excerpts containing Model Town constitute a very small part of the overall discussion; e.g. Anthony King has used one quotation from an ex-resident's autobiography of the town to illustrate character of the bungalows in Lahore⁸⁹; Masood Khan's paper⁹⁰ is focussed on cultural transfers and uses some examples and old photographs from Model Town to illustrate his viewpoints; Fakir Syed Aijazuddin and Pervaiz and Sajida Vandal have replicated Diwan Khem Chand's publication date 1930 'The Scheme for a Model Town and its Realization' almost verbatim⁹¹, and William Glover has used it as an example in the wider context of colonial Lahore⁹². These publications duly identify the importance of the Town. However there is a wide gap in the current knowledge about the Town. Today what is known about it is through Diwan Khem Chand's report which gives

⁸⁴ King, A. D. (1984). *The Bungalow, Production of a Global Culture*. London: Routledge. p.57.

⁸⁵ Khan, M. (1995). Cultural Transfers: The Repossession of Architectural Form. *Environmental Design: Journal of the Islamic Environmental Design Research Centre* 1-2, pp. 84-103.

⁸⁶ Aijazuddin, F.S. (2003). *Lahore Recollected: An Album*. Lahore: Sang-e-meel. pp. 205-212.

⁸⁷ Vandal P. And Vandal S. (2006). *The Raj, Lahore and Bhai Ram Singh*. Lahore: National College of the Arts. pp. 81-94.

⁸⁸ Glover, W.J. (2007). *Making Lahore Modern: Constructing and Imagining a Colonial City*. Minneapolis: University of Minnesota Press. pp. 151-57.

⁸⁹ King, A. D. (1984). *The Bungalow, Production of a Global Culture*. London: Routledge. p.57.

⁹⁰ Khan, M. (1995). Cultural Transfers: The Repossession of Architectural Form. *Environmental Design: Journal of the Islamic Environmental Design Research Centre* 1-2, pp. 84-103.

⁹¹ Aijazuddin, F.S. (2003). *Lahore Recollected: An Album*. pp. 205-212.; Vandal P. And Vandal S. (2006). *The Raj, Lahore and Bhai Ram Singh*. pp. 81-94.

⁹² Glover, W.J. (2007). *Making Lahore Modern: Constructing and Imagining a Colonial City*. pp. 151-57.

away little information other than his own contributions. Even the name of the architect of the town is not known and obscurity has given way for many other people to take credit for work they did not do⁹³.

Why it is important to research about Model Town?

Model Town's uniqueness and innovation is not limited to its urban planning and administration. There are several important temporal, locational and social factors which broaden its appreciation from various dimensions.

(1) In the early twentieth century, numerous celebrated garden cities were developed throughout the world. These included private sector developments at 'home' like Letchworth and Hampstead and under Government patronage in the 'empire' like the new capital cities of Delhi, Canberra and Jerusalem. Model Town, in this context, becomes a unique urban development; a private sector garden city in a colonial city, procured, financed and inhabited by the indigenous population.

(2) Being an idea that was conceived by the 'colonized' native population with moral support from the 'colonial' Government, its development challenges the traditional relationship between the colonized and the colonizers, as well as the strengths and capabilities of the indigenous population in the context. It also demonstrates a native population (or at least a certain segment or 'class' among them) that was not weak and regressed as per the common perceptions⁹⁴. Instead they were capable of progressive thinking, well-informed about latest developments in the world and able to modernise and adapt their own lifestyle. In the same way, it also portrays a Colonial Government which was not completely controlling. There was scope for local innovation, business and radical ideas that could be perceived as upsetting a dominating political occupation. The 'natives' were of course politically repressed – but not to the extent that they could not form their own ideas and develop new initiatives.

⁹³ Discussed in detail later in Chapter 3.

⁹⁴ Discussed in detail in Chapter 2.

(3) 'Native inhabitants form majority of the population in colonial cities, yet most urban histories ignore their experience of the city and their contribution to making of its form'⁹⁵. The role of native communities in the physical development of a city under the influence of modernization, cultural and social influences thus becomes an interesting area for understanding their position, aspirations and limitations under the colonial rule.

(4) The Town was planned to be 'self-sufficient and self-contained' with 'complete *swaraj* [freedom] within its own limits'⁹⁶. Thus it had its own bye-laws and services like powerhouse for generating electricity, bus service, water supply and sanitation and gardens. The administration of the town was able to implement its own tariffs for services independent from the ones prevailing in the city of Lahore. This is a unique example in itself.

(5) Being the first complete co-operative housing society in the subcontinent, the development and administrative strategies used in the formation of this Town provided a ground-breaking solution for embarking upon the problem of housing shortage. Mr. Gandhi emphasised the importance of this development to be used as a benchmark for future developments in the following words:

..... all of them (refugees), professionals and non-professionals, rich and poor, should hold together and establish model town-ships as moneyed men of Lahore had built the model town of Lahore, which the Hindus and Sikhs had felt compelled to evacuate. These townships would remove the pressure from crowded cities like Delhi and they would promote the health and well-being of the inmates⁹⁷.

Even today, the idea of co-operative housing is being used and implemented by Government and private departments to cater for the housing problems in the Subcontinent⁹⁸.

⁹⁵ Chopra, P. (2003). *The City and its Fragments: Colonial Bombay 1854-1918*. PhD Dissertation University of California Berkeley. p. xix.

⁹⁶ Varma, K.C. (1936). The Model Town. *Indian Co-operative Review*. Vol.2. p.624.

⁹⁷ Gandhi, M.K. (1948). *Delhi Diary, Prayer Speeches from 10-9-47 to 30-1-48*. Ahmedabad: Navajivan Publication House. p.195.

⁹⁸ Nenova, T. (2010). *Expanding Housing Finance to the Underserved in South Asia: Market Review and Forward Agenda*. Washington: World Bank. p.173.

(6) Model Town was developed by the native 'educated' middle classes. Historically the middle class has been associated with being "strategic" and "rapidly progressive"⁹⁹, and hence the British prided themselves in belonging to the middle class¹⁰⁰. Accordingly the sentiment prevailed that 'India has from first to last been a middleclass possession, won by middleclass ambition and sagacity', 'governed at home by middleclass agency' and 'administered by middleclass instrumentality'.¹⁰¹ Consequently with the rise of a parallel local middle class; i.e. 'The class of people which arose as a result of changes in the British social policy and with the introduction of the new education, economic system and industry and with the subsequent growth of new professions'¹⁰² the social structure of both these classes was moulded by the cross cultural encounters. As a result, boundaries between the various specialized segments of the city districts started to diminish. Hence,

As the raj grew older the divisions between the cultures became more blurred, on the ground if not in the mind. Some of the indigenous muddle infected the Civil lines and the Cantonment, some of the imperial hauteur marched through the city gates into the old town, and as Indians began to enter the higher ranks of administration the clear-cut barriers between the races began to weaken. The best example of a city of this sort in its half-reconciled maturity was Lahore the capital of Punjab....¹⁰³

(7) The fact that the idea was implemented in the capital of Punjab is also very important. Punjab, the 'granary of India' was the last province to be occupied by the British in 1849 and hence it remained under the colonial rule for under a century. Being an agrarian province the basic social structure of the province was based on two rigid classes. The dominant class included the rich landed

⁹⁹ Wahrman, D. (1995). *Imagining the Middle Class: The Political Representation of Class in Britain, c. 1780-1840*. Cambridge: Cambridge University Press. p. 59.

¹⁰⁰ Daechsel, M. (2012). Being Middle Class in Late Colonial Punjab. *Punjab Reconsidered: History, Culture, and Practice*. New Delhi: Oxford University Press. p. 321.

¹⁰¹ The Daily News, London 03 Oct 1857 as cited in Daechsel, M. (2012). Being Middle Class in Late Colonial Punjab. *Punjab Reconsidered: History, Culture, and Practice*. New Delhi: Oxford University Press. p.321.

¹⁰² Chanana, K. (1964). The Middle Class in India. *Economic Weekly*. Vol. 16, Issue No.15, 11 April. p.683.

¹⁰³ Morris J. (2004). *Stones of Empire Buildings of the Raj*. p. 205.

elites and *Sufi pirs* [religious saints]. The lower class included poor *kammi*, [dependants of the landed elite who worked on land to earn their basic needs] and *mureed* [the peasant followers of the pir]. Even in politics, the Punjab was ruled by the Unionist Party which comprised of members from the dominant landed elites and pirs. This system resisted modern interventions and deviation from social structure because that would result in disturbing the social balance which was working in harmony because of the poor class being dependent on the rich class.¹⁰⁴

(8) The Town also serves as an example of how urban dynamics of a planned area change as a result of independence by partition. The ethnic cleansing which followed across the borders of Punjab as a result of its division amongst India and Pakistan in 1947 resulted in migration of 1089 (out of a total of 1366) residents of the Town. Due to availability of empty residential buildings, refugees from across the other side of the border settled in many parts of the area. As a result the uniformity, harmony and symmetry of the town was altered in several places resulting in new configurations in land use.

(9) In a country with complicated social segregations based on religious stratification the Town aspired to bring people from all the religions and ethnicities together. In this context it provides a ground for an interesting social study where the desire to live a happier, healthier and better lives preceded any preconceived social ideals prevailing in the contemporary Indian societies.

(10) Historically, especially with reference to city of Lahore, the suburban development was associated with nobles, royal families and the rulers. It was the first time the middle class opted for suburban living. In this context this becomes an interesting study to examine the changes that were occurring in the middle class life styles that urged them to live away from the congested city centres in quiet suburbs and consequently, how the concept of suburban living was being transformed by these middle classes.

(11) Model Town Lahore is an excellent example to illustrate the stories of its bygone residents (discussed earlier). Many of them had thought that they

¹⁰⁴ Daechsel, M. (2012). Being Middle Class in Late Colonial Punjab. *Punjab Reconsidered: History, Culture, and Practice*. p.321.

would be able to return once the political conditions were stable but their dream never materialized. Last seven decades have transformed many aspects of the Town, yet the remnants of its original residents still adorn the area majestically. However, they will not endure for long as deterioration, neglect, adaptive reuse and reconstructions are changing the face of the Town.

In the light of these aspects, this thesis is an attempt to document its history, urban and social character and architecture visualize the idea of this utopian suburban town in its initial years (1919-1947) and interpret its influences on urban planning in colonial and post-colonial Lahore.

Aims and Objectives

The aim of this study is to explore the contributions of colonized native communities in shaping a colonial city with particular focus on the areas developed as a result of influences of western urban planning and architectural ideologies; both developed for the home country as well as colonies. The focus area, in particular, is Model Town and thus the key objectives of this study are:

- (1) By documenting history of the Model Town from primary sources, develop an insight into the process of formulation of a native urban development within a colonial context and create an understanding of the unacknowledged contributions of local pre-independence communities in the region.
- (2) Using Urban planning model of Model Town as a case study, develop an understanding of how amalgamation of Western town planning ideologies and local cultural, social and religious practices have contributed in developing a framework of urban development for the post-colonial cities.
- (3) By documenting and analysing different types of building within the Model Town, create an understanding of how hybrid architectural forms emerged and contributed to self-expression of both the colonizer and the colonized.

Research Questions

Based on these research objectives, the research questions can be categorized in three specific groups relating to the Model Town. These include:

(1) Historiography

Model Town does not have a concise and formal documented history. Much of what is known about the area is based on oral traditions, or a single official document. This section includes basic questions about the development of the town. These include:

1. How the idea of a Model Town was conceived and what were the key social and urban ideas from around the world which were incorporated in Diwan Khem Chand's 'My Scheme'?
2. What was the process through which the idea of Model Town was realized?
3. How the design of the town was achieved and who was the architect/planner of the town?
4. Who were the key persons responsible for realization of the idea of a model town in Lahore?

(2) Urban form

This section of questions deals with the geometric urban form and how it reflected the social character of its early members and residents. The questions in this section include:

1. Why the planners and planning committee of the Town opted for an urban plan based on pure geometric form?
2. How the urban form of this Town corresponds to Ebenezer Howard's Garden City Model?
3. How British town planning ideas that were developed in Lahore influenced the design of Model town?

(3) Social Character

This section is a quest for learning about people who inhabited this Town in the early days. Hence the primary question is:

1. Who were the earliest members and residents of the area, and how did they shape its physical and social character?

(4) Architecture

This section deals with the architectural style developed in the Model Town for various building typologies. The questions in this section include:

1. What types of public architectural styles were developed in the Model town and what were they key influences behind them?
2. What types of different religious buildings were designed for the Town and how they were designed?
3. How did the local people adapt bungalow to accommodate their individual needs and pockets?

The Concluding Debate

These research questions will be analysed in the broader context of the Indian Subcontinent with focus on three key aspects.

- (1) How British town planning ideas were exported to the colonies and during this process gave rise to new urban forms as a result of influences of local climate, cultural, social and religious traditions?
- (2) How hybrid forms in architecture have developed in Punjab due to amalgamation of local and foreign architectural, structural and craftsmanship ideas?
- (3) How Model Town became a model for post-independence urban development in Pakistan and India?
- (3) Why significant contributions by the local communities of pre-1947 era remain unacknowledged?

Organization of the Dissertation

This dissertation has been divided into six chapters. Following is a brief description of the contents of the chapters other than *Chapter 1 - Introduction* (being the current chapter).

Chapter 2 - Sources and Methods

This Chapter elaborates on two main aspects to establish the context of this study. *Research Methods* describes the theoretical and methodological framework as well as the process of research. It elaborates on how and where the different phases of this study, archival research, site surveys and documentation of in-situ buildings, were conducted. In the context of prevailing political and security conditions *Problems of Conducting Research in Pakistan* is an overview of how different people have conducted research about Pakistan in the last twenty years and what type of problems they have faced in the process. I have also included my personal experiences and the problems that resulted due to unexpected situations.

Chapter 3 - The Scheme for a Model Town

This chapters expounds on the history of the Town as documented from using newspapers as a contemporary source of information together with primary writings of Diwan Khem Chand, the founder. *The Founder* describes life and character sketch of the Diwan Khem Chand and gives an insight into the factors that contributed towards his idea of a model garden suburbs in Lahore. *The Scheme* discusses the key ideas of Khem Chand's Model Town and analyses them in the light of various western ideologies, modernism, co-operation and the Garden City Movement, prevailing in the world during the early twentieth century.

Chapter 4 - From Idea to Inception

This Chapter elaborates on the process of formation of the Town. It describes in detail the journey between the idea and its realization. *Public and Government Support* describes how Khem Chand propagated his scheme and obtained approval from prospective residents and the Government. *Site Selection and Acquisition* elaborates on the official procedure for various tasks

and site acquisition. *The Design Competition* gives an insight into the key personalities responsible for realization of this idea. *The Inauguration* marks the end point of the early journey with by discussing the first landmark event in the history of the Town, laying of foundation stone of its first public building. *Construction of the Town* provides information about the development of the town in its earliest days. This chapter culminates on *Financial Crisis* which describes how the Town underwent financial hardships in the 1930s.

Chapter 5 - Urban Form

This chapter describes the characteristic urban form of the Town with reference to its pre-1947 ambience. Urban form is discussed in the light of three aspects. *Size, Scale and Form* analyses the geometrical properties of the plan. *Salient Features of the Plan* discusses the key areas and facilities within the plan. *Analysing the Plan* visualizes Model town in comparison to contemporary British and indigenous residential areas of Lahore.

Chapter 6 - Social Character

This chapter describes the social character of the Town. Social Character of the Town elaborates on three aspects; *The Cosmopolitan Social Geometry of the Town* analyses the different religious, ethnic and professional segments within the early members of the Town. *Social Character of the Town* uses the autobiographical accounts by the early residents to describe their experiences life in a new town. *And then came the 'Independence'* discusses the uprooting of earlier residents in the events that followed the aftermath of independence of the British India.

Chapter 7 - Public and Religious Architecture

This chapter elaborates on the Public and Religious architecture produced in the Model Town and tries to visualize it in the realm of prevailing architecture in the region particularly Lahore. This chapter is also divide into two sub-groups. *Public Buildings* expounds on the design and planning of different public buildings in the area. *Religious Architecture* discusses the three religious buildings in the area, the mandir, gurudwara and *masjid* [mosque],

and describes how their ambience was affected as a result of events that followed the independence of India and Pakistan.

Chapter 8 - Residential Architecture

This Chapter looks into the different types of bungalows developed in the Town. It looks into two aspects. *Sources of House Designs* gives an insight into house design practices in the Town and various sources of inspiration for these designs with reference to colonial Lahore. *House Designs in the Model Town Lahore* documents and analyses the original bungalows of the Town. *Towards and Indian Bungalow* is a critique of Model town bungalows in comparison to the British bungalows.

Chapter 9 - Conclusions

The concluding debate highlights the major findings from the earlier chapters and highlights the areas which stem out from this research and can be studied as a sequel, in continuation or in relation to this research.

Contribution to Knowledge

My contribution to knowledge is envisaging Model town as an independent entity and attempting to understand its dynamics within the context of colonial Lahore. Through its analysis the aim is to understand the relationship between cultural transfers and the built environment particularly in relation to production of new forms in architecture.

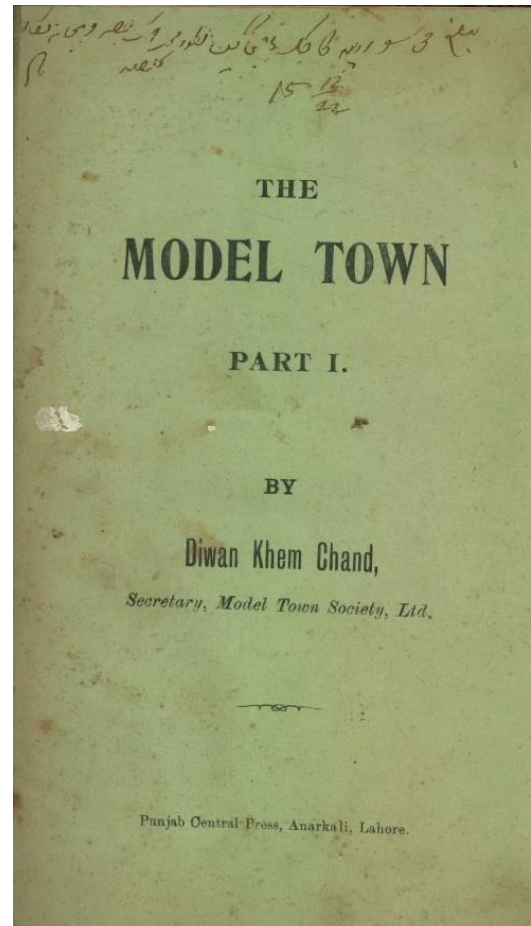
Sources and Methods

Author: Diwan Khem Chand

c. 1922

2-1 A rare book about the Model Town

This rare manuscript, probably the only surviving copy in a public domain library, is present in Government College University Library Lahore. This particular copy bears an inscription in Urdu at the top which states; "Received a cheque of Rs. 300/- for 1/5th share and down-payment of a house. Dated 15/12/1922."



CONTENTS

Research Methods

Problems of Conducting Research in Lahore

This chapter elaborates upon the research process for this study by defining the research methods and their underlying theoretical and methodological framework. Based on the defined methods it explains the research design and its significant characteristics keeping in view the area specific difficulties encountered during the process. By doing this the chapter aims at providing an analytical overview of the research process for this study.

Research Methods

As an architectural historiography study, the basic research methods have been adapted after Linda Groat and David Wang's guidelines on historical research in architecture¹. Hence, this study attempts to bring 'something' from the past of Model Town by looking for 'evidences', endeavours to interpret these evidences in the light of other contemporary studies and practices, and in the end tries to narrate and interpret the cultural meaning by drawing insights from the cultural anthropology. This process is undertaken by at its first stage by defining a theoretical and methodological framework for the study.

Theoretical Framework

Colonial cultural and architectural discourse has primarily revolved around two notions of 'pure' and 'hybridity'. The terms 'pure' has been used to define the civilized 'white' races and correspondingly unadulterated adaptation of western architectural styles in the colonies. These were considered superior and refined thus establishing the core principle of western colonialism which set out to enlighten the inferior, savage and uncultured east. In post-colonial theories, 'hybridity' has been associated with Homi Bhabha as a powerful insurrection of colonialism's dualistic hostilities.² Thus, the 'hybrid' best defined as 'an entity created out of crossing two dissimilar entities'³ is the unintended by-product of this colonial enlightenment as it emerged when the cultural, racial and architectural products which emerged when the boundaries between western and indigenous, colonizer and colonized and as a result

¹ Groat, L. and Wang, D. (2002). *Architectural Research Methods*. New York: J. Wiley. p. 174-177.

² Bhabha, H. (1994). *The Location of Culture*. London: Routledge.

³ Morton, P. (2003). *Hybrid Modernities*. 2nd ed. Cambridge, Mass.: MIT Press. p. 13.

superior and inferior started to blur as a consequence of fusion of eastern and western ideologies.

The term architectural hybrid has been used by many architectural historians with different meanings. For example, despite being elegant or seemingly elegant, eg. the composite order of Greek columns, these hybrids have received contradictory reaction ranging from 'fantastic'⁴ to 'unholy child'⁵. James Fergusson used the term hybrid architecture to define the Muslim (or Indo-Sarcenic as it was termed by the British) architecture of India⁶ to distinguish it from the British architecture in India. Jayewardene-Pillai has argued that Muslim architecture was termed hybrid so that the British could legitimise that Muslim architecture was as foreign to the Indian subcontinent as were the British developments.⁷ However Adam Hardy has used the term hybrid for those Indian temple designs where features from different eras were used⁸. Perhaps the best explanation of architectural hybridity is provided by Nezzar AlSayyad who has argued that hybridity is a very complex notion which at its most basic level can be interpreted as the interbreeding or mixing of different peoples, cultures and societies.⁹

Understanding the concept of hybridity particularly with reference to the Indian subcontinent is important as many recent studies have regarded Indian cities as hybrids due to co-existence of a multitude of architectural styles. The following description elaborates on three major studies in this respect.

⁴ Mitchell, T. (1870). *A rudimentary Manual of Architecture*. London: Longman Green. p. 210.

⁵ Morris, R. (1860). *Tales of Masonic Life*. Louisville. KY: Morris and Monsarrat. p. 123.

⁶ Fergusson, J. (1867). *On the Study of Indian Architecture: Read at a Meeting of the Society of Arts on Wednesday, 19th December 1886*. London: J. Murray. p. 30.

⁷ Jayewardene-Pillai, S. (2007). *Imperial Conversations: Indo-Britons and the Architecture of South India*. New Delhi: Yoda Press.

⁸ Hardy, A. (1995). *Indian Temple Architecture: Form and Transformation*. New Delhi: Abhinav Publications. p. 301.

⁹ AlSayyad, N. (ed.) (2001). *Hybrid Urbanism: On the Identity Discourse and the Built Environment*. Westport (USA): Greenwood Publishing.

In *Making Lahore Modern: Constructing and Imagining a Colonial City* (2008) William Glover provides an overview of Colonial Lahore in the light of colonial influences. According to him

Colonial era urbanization produced urban forms, infrastructures, functions and ideas that were entirely novel in the subcontinent, even in those towns and cities that declined under British rule.¹⁰

However his interpretations of Lahore's urban architecture expands the notion of a city constructed upon a 'hybrid model' with a "distinctive social and cultural milieu"¹¹ thus taking into consideration the different architectural styles layered upon the urban fabric of Lahore.

Similarly in *Representing Calcutta: Modernity, Nationalism, and the Colonial Uncanny* (2005) Swati Chattopadhyay has explored the "structures of power and knowledge" and elaborates on development in the city as a result of British influences and practices. In her view, Calcutta as a city was developed as a fragmented British composition with clear defined boundaries that differentiated between its "dark and lit spaces. The distance between these spaces for the "Object" and the "Subject" were clear cut and physical. This difference generated two different cities within the city, one that was framed on European models and the other which retained its nationalistic individualism¹² thus making it a hybrid urban model.

Perhaps the best interpretation of an Indian hybrid city can be understood by Jyoti Hosagrahar's concept of *indigenous modernities*¹³ which she explained with reference to Delhi. According to her Delhi was transformed into a hybrid as a result of amalgamation of indigenous and foreign elements in paradoxical and unstable combinations. Her criticism revolves around the theme that the colonial urban restructuring ideals imposed on Delhi in the process of making it a new imperial capital were neither purely "Indian" nor purely "Western".

¹⁰ Glover, W.J., (2007). *Making Lahore Modern: Constructing and Imagining a Colonial City*. Minneapolis: University of Minnesota Press. p. xiii.

¹¹ Ibid.

¹² Chattopadhyay, S. (2005). *Representing Calcutta: Modernity, Nationalism, and the Colonial Uncanny*, Asia's Great Cities; Asia's Transformations. London; New York: Routledge.

¹³ Hosagrahar, J. (2005). *Indigenous Modernities*. London: Routledge. p. 2.

Hence the resultant product was “the irregular, the uneven, and the unexpected” exhibiting a juxtaposition of a variety of elements of various characters. She has argue that

All modernisms are the consequence of negotiations of an imagined ideal with the particularities of a place and its socio-political context and hence are *indigenous modernities*.¹⁴

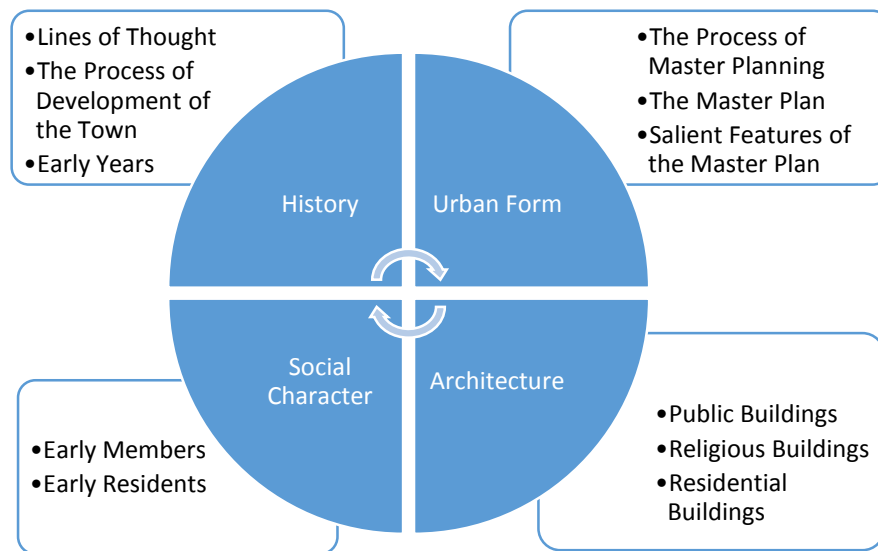
Keeping in view that the western modernism was introduced into the non-western cultures as a result of colonialism, it was accordingly a foreign idea duly imposed from the outside and not a native initiative evolving from the inside. As a result, the notion of indigenous modernities implies that the western modernism should be viewed as a relative movement which depends upon the locational, social, political, religious and temporal characteristics.

Methodological Framework

The methodological framework for this study is derived from the conceptual framework devised from the research questions. Therefore, it has been designed around four investigative themes; history, urban form, architecture and the social character derived from the research questions stated in Chapter 1. These themes are interrelated as they share a common event in history (i.e. the creation of the Model Town Lahore) and human factor (i.e. the people who were involved from the idea of a model town in Lahore to its realization and later in the development of the Town). Therefore these are indispensable for developing a collective understanding of the Model Town.

The first theme, *History*, relates to the background story of formation of the Town. It elaborates on the lines of thought that gave rise to the idea of a model town, the process involved in realization of the idea and its early years. The second theme, *Urban form*, elaborates on the process of master planning and its salient features. The third theme, *Architecture*, looks into the different building typologies, public, religious and residential, within the Town. The fourth theme, *Social Character*, gives an insight into the lives of people who opted to live in the Town.

¹⁴ Ibid. p. 191



2–2 The Methodological Framework for the study

An important limitation of this conceptual framework is the time span it covers. Presently the Town exists as an important part of Lahore, but this research is focussing on all aforementioned themes before the independence of British India in 1947. The primary methodologies used for undertaking this research have been drawn after architectural historiography methods as described by Arnold, Ergut, and Ozkaya (2006)¹⁵, Groat and Wang (2013)¹⁶ and Leach (2010)¹⁷, and therefore can be seen in the light of two distinct sources of information.

(1) Historical Interpretations

(2) The Built Environment

Both these sources act as ‘evidence’ which form the basis of analysis and interpretation. What constitutes as evidence is discussed in the following section.

¹⁵ Arnold, D., Ergut, E. and Özkaya, B. T. (2006). *Rethinking Architectural Historiography*. London: Routledge.

¹⁶ Groat, L., & Wang, D. (2012). *Architectural Research Methods*. 2nd ed. New Jersey: John Wiley & Sons.

¹⁷ Leach, A. (2010). *What is Architectural History?* Cambridge: Polity Press.

What Constitutes as an 'Evidence'

According to John Tosh the historians are “as true as they can be to the surviving evidence of the past”¹⁸. Therefore, in pursuit of evidence for this study, the first step was the analysis of existing studies about the Model Town with reference to their contents. This was undertaken with a particular aim of collating the primary documents used within these studies. Table 1 shows a breakdown of the resultant findings.

Publication	Primary Documented Sources used as Evidence
King (1984)	Tandon, Prakash. (1968), ' <u>Punjabi Century 1857-1947</u> '
Khan (1995)	Reports of the Co-operative Societies in the Punjab (1915-1923-1924-1925)
Aijazuddin (2003)	Chand, Dewan Khem (1930) 'The Scheme of a Model Town and its Realization'
Vandal (2006)	Chand, Dewan Khem (1930) 'The Scheme of a Model Town and its Realization' Tandon, Prakash. (1968), ' <u>Punjabi Century 1857-1947</u> '
Glover (2008)	Tandon, Prakash. (1968), ' <u>Punjabi Century 1857-1947</u> '

Table 1 Evaluation of Selected Secondary Sources

From

Table 1 it can be seen that the current state of knowledge about the Model Town falls under three broad categories.

(1) Memories, traditions and practices as narrated by its earlier residents. eg. Prakash Tandon's *Punjabi Century* (1968), and those by a Lahore-originated practicing architect, i.e. Masood Khan's *Cultural transfers* (1995).

¹⁸Tosh, J. (2010). *The Pursuit of History*. 5th ed. Edinburgh Gate, UK: Pearson Education Limited. pp. 206–207.

(2) Organization of knowledge from authorities, i.e. person/s whose remembrances are believed by historians. eg. Descriptions of Model Town in Fakir Syed Aijazuddin's *Lahore Recollected* (2004) and Pervaiz and Sajida Vandal's *The Raj, Lahore and Bhai Ram Singh* (2006) is derived from a single authoritative historical document *The Scheme of a Model Town and its realization (1930) which was written* by the founder of the Town, *Diwan Khem Chand*. Similarly Masood Khan (1995) has used official documentation from the records of *Co-operative Societies in the Punjab* to substantiate his description of the Town.

(3) Studies which have used information provided by (1) and (2) from secondary sources. eg. Tandon (1968) has been used by Anthony King, William Glover and Pervaiz and Sajida Vandal.

Memories and *authorities* are two very important aspects of historiography as they help in preserving evidence. But as individual works all these are centred along single view-points; whether it is the authors themselves or a single known official document about the Town. The content of these works gives more room for speculation and there are clear gaps in historical documentation which at times give rise to contradiction of facts. One very illustrious example in this case is the competition held for design of the Town which was very eloquently publicised, yet there is no mention of any contestants, their designs and design philosophies as the originator of the idea takes credit of everything.

By using the historical narration and the evidence the ultimate aim of this process of historical construction is to create an understanding of history of Model Town as a re-enactment of the past experiences.

Research Design

The research design for this study has been interwoven around the two parallel experience zones, the timeline and the built environment. Both these are interrelated because the evidence in one also provides evidence for the other, yet distinct due to the nature of evaluation of evidence where the former requires documented facts and the latter needs interpretation from the buildings. The initiation of the primary study has been from the data collection phase where the strategy for both of these zones has been modified according

to the research questions. For the purpose of inquiry, both of these aspects have the same starting point, i.e. April 11, 1924 (when the first public building of the Town was inaugurated). This was a natural choice guided as it was the the only exact date known about any major event of the Town. This evidence is inscribed on a building in the form of an inauguration plaque, hence it also becomes a physical evidence.



Photograph by: Shama Anbrine

2011.

2–3 The Foundation Plaque Model Town Lahore

The Timeline

The starting point of data collection phase was review of secondary literature directly related to the Model Town with special attention to primary sources cited in them. The aim of this exercise was to locate the original sources and re-evaluate them to create further interpretations by determining the kind of sources were used by these authors and inferring whether similar conclusion can be drawn by re-examining them.

Two of the previous studies on Model Town Lahore (Aijazuddin, 2003 and Vandal and Vandal, 2006) have relied significantly on one single authoritative historical document (Chand, 1930) and hence their resulting texts are similar, in many instances, even verbatim. My first task was to locate that original text in which I was originally unsuccessful¹⁹. As a replacement for that document,

¹⁹ I was not able to locate the text in any public domain library in Lahore or the UK (2010-2013). In this time I also had a chance to meet Pervaiz Vandal personally during my visit to

I resorted to using alternative sources for the purpose of historical construction. These explorations were carried out mainly in the following places; the British Library London (St. Pancras and Colindale), University of Liverpool (Sydney Jones and Donald Mason Libraries), University of Engineering and Technology Lahore and Government College University Lahore Library. These include:

Government Documents

A comprehensive set of all official reports of British India is available in the India Office Collections at the British Library and hence I incorporated the following reports in my study.

Since Khan (2005) had used *Reports of the Co-operative Societies in the Punjab*, I started my exploration from these reports. Model Town was primarily a cooperative society and the 'Cooperative Societies in Punjab' was a Government-led initiative to develop the habits of self-help and thrift among the local population which was started in 1896²⁰. Accordingly each year (until 1946) a comprehensive report was compiled to show its progress in various parts of Punjab.

The second official source explored was the *Reports of the Royal Commission on Labour in India*. The Royal commission was formed in 1929 to investigate the situation of prevailing conditions of Labour in various industrial undertakings in British India.

The third official source investigated was the official record of Punjab Public Works Department (PWD). Public Works department resources provide invaluable information about the construction of buildings and urban areas during the British period.

Lahore in June/July 2011. He was indirectly reluctant in sharing his personal copy of the report as he kept on referring me to his book for each of my question. I tried to contact F.S. Aijazuddin around the same time through his website but did not receive any response. In February 2014 he updated his email on the website and upon contact he was willing to send me a scan of this report. I am still waiting for the copy.

²⁰ For details see Calvert, H. (1926). *The Law and Principles of Co-Operation: Being the Co-Operative Societies Act, No II of 1912 and Bombay Act No VII of 1925*, With Introduction, Notes and an Appendix. Calcutta: Thaker.

One of the reasons behind needing a new town were the existing sanitary conditions of Lahore (discussed in Chapter 1) and hence the *Reports of the Sanitary Department* were explored as a source of (potential) information.

The Model Town Society Office at Lahore also maintains official records of its activities. Unfortunately there are no documents available from before 1960's as much of the older record which was kept in a basement was destroyed during the floods of 1988. Rest have perished due to their fate in time and space as a result of (probable) neglect. However they were only able to offer a copy of a souvenir document which was presented to the United Nation Economic Commission on their visit to the Town in 1951.

Though I was not able to get hold of Khem Chand's 1930 report, I located an even earlier pamphlet by him published in 1922, 2-1, in the Government College University (GCU) Lahore Library catalogue. It was part of Dr. Waheed Qureshi collections, gifted on behalf of famous Urdu writer Mirza Adeeb's family. This report was a compilation of five pamphlets which were published by the founder Diwan Khem Chand (possibly self-sponsored). These described the idea of a Model town which was presented in 1919 to the progress of the development of the Town until 1922. This document has not been used by any researcher before.

The later archives that were searched include Sydney Jones Library Archives and School of Tropical Medicine Library at University of Liverpool, and free resources available from Project Gutenberg and DSpace Gokhle Institute of Politics and Economics (GIPE) Library India. Sydney Jones library archives has access to many private papers. Among them are Baron Holford's private papers, which interestingly contained early Reports of Pakistan Planning Commission and a report by Grenfell Rudduck detailing towns and villages of Pakistan²¹. That was an unusual source, as Baron Holford was never involved in planning or architectural practice in Pakistan. As it turned out later, Grenfell Rudduck was Baron Holford's student in 1947 in UCL, and as a consultant to Pakistan Planning Commission he had sent out these reports to various

²¹ Rudduck, G. (1961). *Towns and Villages of Pakistan, A Study*. Karachi: Government of Pakistan Planning Commission.

architects and planners for suggestions. The report had the first post-independence map of Lahore containing Model Town²².

Health and sanitation have been an important factors in British town planning in the colonies (as discussed later in Chapter 3). The Library at the School of Tropical Medicine University of Liverpool has complete records of health and sanitary reports of Punjab among other reports of similar nature for various other parts of India. These helped in developing a background of Lahore with reference to health and sanitation conditions prevailing in the city in early twentieth century.

All these documents, however, were not sufficient as the first building of the town was inaugurated in 1924, 2–3, there were missing details so I had to look up to alternate sources for more data and verifications.

Newspapers as a Source of contemporary history

Newspapers are an important source of contemporary history as they occupy a strategic position as a ‘chronicler of events’ which ‘records the ephemeral happenings of the days, and the great and small events of the weeks and years²³. Hence I reverted to the use of newspapers for historical evidences. The first step in this case was the identification of sources of newspapers. Gale and ProQuest databases were the natural starting points due to their online availability and keyword search facility which reduces the time in surfing through the physical newspapers. However these are international databases and while they have newspaper articles and news items from Lahore, they have only reported major events like the Coronation Durbar or earthquakes.

For newspapers in local language Urdu I consulted Punjab Public Library in Lahore during my visit in June-July 2011. Punjab Public Library have digitized copies of two prominent pre-independence Muslim daily newspapers of Lahore, *Imroze* and *Paisa Akhbar* (an equivalent to the Penny Newspaper). To my surprise there was not a single mention of Model Town in these newspapers. This is not an unknown situation in research context within the

²² Ibid. p. 122.

²³ Weicht, C. L. (1932). The Local Historian and the Newspaper. *Minnesota History*. Vol. 13. No. 1. p. 45.

sub-continent as Hirschmann has identified that the South Asian newspapers clearly reflect 'the focus of interest of a particular group at a particular time'²⁴ and hence:

For Anglo- Indian papers, the pride of place went to news from "home," and Parliamentary speeches, literary and theatrical events, and comments on the social season seemed never too stale for publication. The Muslim papers, after the demise of the Mughal court, showed a great affinity for the Ottoman sultan as caliph and champion of Islam.²⁵

All the local newspapers of Lahore, regardless of Muslim or Hindu patronage, were published in Urdu²⁶. My next search was for the Hindu newspapers of Lahore as 'before independence, Lahore was home to a number of Hindu newspapers'²⁷. These included *Pratap*, *Milap*, *Bande Matram*, *Paras* and *Bharat Mata*²⁸. Unfortunately no library in Lahore has any preserved copies of these newspapers. Hence after my return I turned to the British Library for further research.

The British Library is home to one of the world's largest newspaper archive which include many newspapers from the regions included in present India and Pakistan. Previously part of the India Office Collection, these newspapers (primarily English newspapers) in physical format are available in British Library's reading rooms in Colindale. Along with print newspapers from the sub-continent, the British library also has exclusive access to digitized database of *The Times of India* from 1861 to date which can be accessed in the reading rooms at St. Pancras. In the Times of India digital database, the keyword 'model town' and 'Lahore' came up with six news items between 1922 and 1938. All these news items described interesting events in the history of the Town. *Lahore House Shortage* (1922) described the housing condition in Lahore and elaborated upon the decision of the Model Town Society to offer

²⁴ Hirschmann, H. (1971) Using South Asian Newspapers for Historical Research. p.146.

²⁵ Ibid.

²⁶ Hameed, A. (2008). Lahore's pre-1947 Hindu Newspapers. *Lahore Lahore Aye* [Lahore is Lahore] translated by Khalid Hasan. Lahore: Vanguard Books.

²⁷ Ibid.

²⁸ Ibid.

a prize for design competition of a new Town in Lahore.²⁹ *Model Town Society, Lahore* (1924) was a letter by a retired engineer to the editor who complained about the design competition for houses.³⁰ *Town Planning in Lahore* (1924) narrated the inauguration of the first public building of the Town.³¹ A Model Town. Punjab Government Remit Interest (1928) described how Government had given relief to the Town by giving a remittance in interest.³² *Platform held to be Mosque* (1935) described a religious conflicting incidence in the Town.³³ *Dewan Khem Chand* (1939) was a news item informing that the founder of the town was appointed on a National Housing Committee.³⁴

These news reports became a source of new information about the history of the Town. The range of the news stories also gave a tentative idea about the dates when some important events related to the Town may have happen. These information were later very helpful when newspapers in physical format were explored for historic events.

The British Library newspaper section at Colindale does not have any newspapers from Lahore in local languages but it has a sizeable collection of *The Civil and Military Gazette* Lahore from 1906 to 1963. This newspaper was run under the official government patronage and is most popular for its association with Rudyard Kipling who worked there as an Associate Editor in early days of his career from 1882 to 1887³⁵.

²⁹ By Own Correspondent. (1922). Lahore House Shortage. *The Times of India* [Bombay]. 19 May. p.7.

³⁰ Retired Engineer (pseudonym) (1924). Model Town Society, Lahore. *The Times of India* [Bombay] 10 Jan. p.15.

³¹ By Own Correspondent. (1924). Town Planning in Lahore. *The Times of India* [Bombay] 14 April. p. 10.

³² By Own Correspondent. (1928). A Model Town. Punjab Government Remit Interest. *The Times of India* [Bombay] 6 Dec. p.12.

³³ By Own Correspondent. (1935). Platform held to be Mosque. *The Times of India* [Bombay]. 24 Oct. p.4.

³⁴ By Own Correspondent. (1939). Dewan Khem Chand. *The Times of India* [Bombay] 15 July. p.15.

³⁵ Kipling, R. (1935). *Seven Years Hard in Something of Myself for My Friend Known and Unknown*. Australia: Gutenberg (no pagination)

These newspapers are available as bound volumes with each volume comprising of two months' newspapers. The idea of Model Town was conceived sometime in 1919 and the first building was inaugurated in 1924 hence the study required 5 years' newspapers bound in 30 volumes to be examined. In addition the dates for which I had news items from the Times of India were specifically checked. This was undertaken in ten sessions scattered over a period of four months at the Colindale reading room between September 2012 and January 2013. The resultant findings from examining the Civil and Military Gazette news reports were quite comprehensive. There were four detailed news reports about the Town which covered the issues about land acquisition³⁶, the design competition³⁷, main features of the layout plan³⁸ and inauguration of the first public building³⁹. Interestingly, there was also a detailed letter criticising the Town for its proposed central garden and wastage of water⁴⁰.

Using newspapers as a contemporary source of history helped in unearthing major events and information about the lost local history of Model Town. However, my quest did not end here and in order to gather some anthropological data my focus reverted to other publications which mentioned any detail about the Town.

³⁶ By Own Correspondent. (1922). Lahore's Model Suburbs, Settlement of Land Acquisition, Solid Progress. *Civil and Military Gazette* [Lahore]. 19 May. p.14.

³⁷ By Own Correspondent. (1922) Model Town's Plans Exhibited. *Civil and Military Gazette* [Lahore]. 20 Dec. p.9.

³⁸ Associated Press. (1923). Lahore's Model Town, Main features of lay-out plan, Scheme approved by Government. *Civil and Military Gazette* [Lahore]. 19 May. p.10.

³⁹ By Own Correspondent. (1924). Lahore's Model Town, Foundation Stone of First Building Laid. *Civil and Military Gazette* [Lahore] 12 April. p.10.

⁴⁰ By Own Correspondent. (1923). Lahore Model Town Scheme, Forcible Criticisms. *Civil and Military Gazette* [Lahore]. 9 June. p.12.

MODEL TOWN'S PLANS EXHIBITED

(BY OUR OWN REPRESENTATIVE.)

Lahore, Dec. 18.—Thirty-two plans under pseudonyms have been received by the executive of the Model Town, Ltd., in connection with the competition for which a prize of Rs.1,200 has been offered for the best plan. On Sunday morning, His Excellency Sir Edward MacLagan visited Sir Ganga Ram's new building on the Mall where the plans were on exhibition. Some of the plans are good but are not altogether satisfactory, and for this reason it is possible that ideas suitable for the Model Suburb will be taken from several plans and the prize divided among those who have submitted them.

The exhibition will be open to the members of the Society on the 17th and 18th December, and after that date to the general public.

LAHORE'S MODEL SUBURB.

SETTLEMENT OF LAND QUESTION.

SOLID PROGRESS.

(BY OUR OWN REPRESENTATIVE.)

MODEL TOWN SOCIETY, LAHORE.

TO THE EDITOR OF THE TIMES OF INDIA.

Sir, In June 1923 in response to a printed circular calling for plans for residential houses for which prizes were offered by the Model Town Society, Lahore, I sent in certain designs with estimates which were duly acknowledged by the Secretary of the Society, the last date for sending in plans for the competition according to the rules being 30th June.

A MODEL TOWN.

PUNJAB GOVERNMENT REMIT INTEREST.

(FROM OUR OWN CORRESPONDENT.)

LAHORE, December 4.

Further progress has been achieved in matters connected with the completion of the Model Town situated in Kot Lakhpat for which the Secretary Dewan Khem Chand and managing committee of the Model Town Society Limited have been working very hard. Yesterday a general meeting was held in the Club

LAHORE'S MODEL TOWN.

MAIN FEATURES OF LAY OUT PLAN.

SCHEME APPROVED BY GOVERNMENT.

(THROUGH THE ASSOCIATED PRESS.)

A few months ago the Model Town Society of Lahore offered a prize of Rs. 1,200 for a lay-out plan that could be adopted for India's First Garden City to be built in the suburbs of Lahore. The intending competitors were supplied with a site plan and the requirements of the town. In response a large number of interesting and instructive designs were received, and they were exhibited to public view for a fortnight in December last. The exhibition attracted a very large number of visitors, and a good many of them made suggestions in a book kept there specially for the purpose.

The plans were judged by the Designs Committee of the Society, but unfortunately they were not able to select any one plan which could be adopted as a whole for the town. The committee, however, selected the following four plans which gave interesting suggestions:—

"Dilnagar," by Mr. G. K. Trilokekar, Architect, Bombay; "Commonsense," by Mr. S. O. Paul, Architect, Calcutta; "Jupiter," by Mr. N. L. Verma, Architect, Allahabad; and "Dilemma," by Dr. J. B. Sahni, Lahore. The prize of Rs. 1,200 was divided among the above plans in proportion to the suggestions taken from them. The Committee entrusted the work of combining the commended plans to Mr. N. L. Verma—one of the prize winners. He spent nearly a month on the work and has produced an excellent plan. He was awarded Rs. 500 more for this work.

LAHORE'S MODEL TOWN.

FOUNDATION STONE OF FIRST BUILDING LAID.

THE GOVERNOR'S SPEECH.

Lahore, April 11.

TOWN PLANNING IN LAHORE.

GOVERNOR LAYS FOUNDATION STONE.

(THROUGH ASSOCIATED PRESS.)

LAHORE, April 11.

2-4 Some Newspaper Clippings about Model Town Lahore (1920-1939)

The reports about development of Model Town were prominently featured in the Times of India (Bombay) and the Civil and Military Gazette (Lahore) between 1920 and 1924.

Books and Journals about Co-operation and Co-operative Societies in the Punjab

During the 1920's and 1930's when the co-operative movement flourishing in India, there was much written on the subject by people of different backgrounds including high profile co-operation activists like Sir Malcom Darling and Hubert Calvert, many local lecturers and professors of economics, Ata Ullah, Rai Bahadur Gupta to name a few, and people involved with development of housing estates on co-operative basis like S. S. Talmaki, were analysing the effects of the cooperative movement in the region. Nearly all of these written works have complemented the idea and development of the Model Town as a unique experiment in the region (see chronological bibliography for further details)

Memoirs

Prakash Tandon's Punjabi Century (1968) is the only autobiographical publication which has been explored in relation to detailed accounts of the life in the Model Town, (discussed earlier in Table 1). While it still holds its place as the most comprehensive account of the early life in the Town, there are many other accounts of life in the Model Town. These have been written by the Town's former and present residents, for instance, Som Anand⁴¹, Freda Bedi⁴² and Sara Ahmad⁴³. The town's ex-president Kanwar Sain⁴⁴ and secretary K.C. Varma⁴⁵ (Full name not known) have also written about the Town. These memoir or autobiographical texts help in elaborating the social character of the Town and gives an insight into the lives of its earlier residents.

Towards a Chronological Bibliography of Model Town Lahore

History, by definition, is a continuous record of important or public events or of a particular trend or institution⁴⁶. Therefore in order to record the history of the

⁴¹ Anand, S. (1998). *Lahore: Portrait of a Lost City*. Lahore: Vanguard. pp. 1, 62, 78.

⁴² Bedi, F. (1972). *Memories of Acharya Raghuvira*. SIKKIM: Luxlapiz. p.17.

⁴³ Ahmed, S. (2006). *Queer Phenomenology: Orientations, Objects, Others*. Durham USA: Duke University Press. pp. 151-2.

⁴⁴ Sain, K. (1978). *Reminiscences of an Engineer*. New Delhi: Young Asia Publications. pp. 46-48.

⁴⁵ Varma, K.C. (1936). The Model Town. *Indian Co-operative Review*. Vol.2. pp. 617-631.

⁴⁶ Oxford English Dictionary

Model Town, a chronological bibliography comprising salient documents, books, newspapers and reports was extracted from all these evidences. Chronological bibliography has been extensively used in linguistic studies however its application in architectural history is not that common. The two instances where I found them used for architectural history were in Magedera⁴⁷ and Wescoat⁴⁸ works. The aim of this bibliography was to find and locate all the major publications and cartographic sources about the Town. This is particularly crucial as many of these sources are not locally available. Even the sources which are available locally are in a state of neglect thus susceptible to damage. Under these circumstances this bibliography is the first step towards the digital archive for Model Town where all these sources will be made available for any further studies in the area or a related area. (The Chronology Bibliography can be found at the end of this report).

The Built Environment

The built environment of the Town has changed dramatically in the last seven decades from what it was in the pre-1947 era. Many of the original buildings have either been demolished, reconstructed or altered. In this context I started my study for the built environment through a visual and photographic survey of the Town. The aim was to locate the original residential buildings and correspondingly obtain access to them through their owners and acquire their plans from the Co-operative Model Town Society (CMTS) records. The CMTS records were also a vital place to obtain the Master Plan and architectural plans of the public and religious buildings of the area. Hence the earlier survey plan for this study comprised of two strategies (1) Visual and Photographic survey (2) Archival research at the CMTS records.

Visual and Photographic Survey

It is not uncommon to conduct research about an area without actually visiting it. In the Information Age where satellite maps and photographs from all over the world are at your fingertips it is very much possible as well. But

⁴⁷ Magedera, I. (2011). French Books on India: From Duplex to Decolonization (Version 3).

⁴⁸ Wescoat, J. (1993). Toward a Map of Mughal Lahore: An Outline of Cartographic Sources from 1590 to 1990. *Environmental Design: Journal of the Islamic Environmental Design Research Centre*. 1-2. pp.186-93.

experiencing a building or area physically in real time helps in understanding many aspects of architecture which cannot be appreciated by virtual means. Hence during my two visits to Lahore, I conducted a visual, photographic and partial architectural survey of the Model town. As a result, the focus was linking the historical and cultural discourse with enacted architecture within the context of the Raj and early twentieth century town planning to construct a broad framework which can help in creating an architectural and social understanding of Model Town. This was undertaken by identifying the older residential building, and analysing their architectural features. This in itself was an extensive task due to a number of factors.

- (1) There are few residential buildings which still survive in well-maintained original form and character.
- (2) Owners of many of these old residences are living abroad and hence the buildings are not accessible from the inside.
- (3) Photography on streets gets superfluous attention by neighbours and their security guards.
- (4) All the blocks have similar plan with the same house numbers, hence greater attention is needed in documentation.

The Model Town is planned in eight identical residential blocks. Using a guide map prepared by a local estate agent, each block was surveyed and the older dwellings were marked. These buildings are easily identifiable amid the new constructions owing to their characteristic appearance, stucco finish in white and yellow colours, and features like brackets and grillwork set in a vast site, 2–5. Together with their deteriorating condition these stand apart from their surroundings that have undergone alterations and further sub-divisions into smaller plots, 2–6.



Photograph by: Shama
Anbrine

2011.

**2-5 An Old House in the
Model Town**



Photograph by: Shama
Anbrine

2011.

**2-6 A New House in the
Model Town**

The second part of this visual survey was documentation of the pre-1947 public and religious buildings. Only the CMTS office and the Post Office remain in their original buildings today. For this purpose The CMTS Office was photographed after seeking permission from the President of the Society, Colonel Kardar, who sent a security guard to monitor the process of photography, 2-7.



Photograph by: Shama
Anbrine

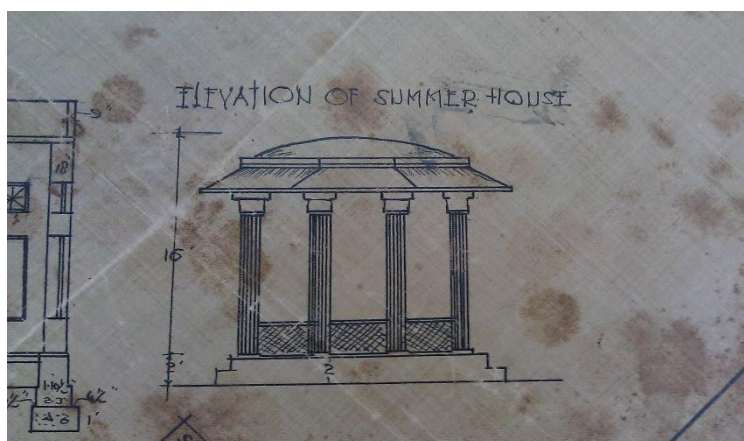
2011.

**2-7 A Security Guard
monitoring the process of
Photography**

The Post Office was photographed from exterior only as permission was not granted to photograph it from inside. The religious buildings, mandir, gurudwara and masjid, were visually surveyed, photographed and documented on site due to unavailability of original drawings.

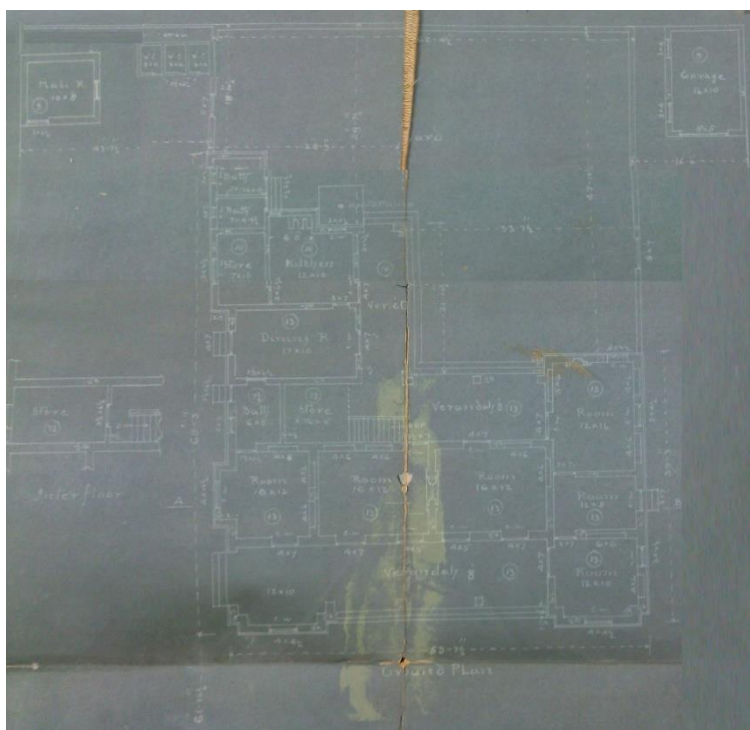
Archives

For acquiring the original drawings of these buildings, CMTS building records were approached. After several visits eleven pre-selected house files were provided by the Incharge Property, the official dealing with property and land matters. In the records of CMTS, each house is assigned a legal size file in which all its drawings are kept. The earlier drawings were made on tracing paper and later its subsequent copies were developed as ammonia prints. The sheets were quite large, usually 30 inches x 20 inches, and had to be folded in order to keep in a legal size file. The condition of the files was quite deteriorated as evident from the yellowed file covers and other documents within. At places there were traces of dampness as the files are stored in a basement, 2–8. The ammonia prints were torn and faded, 2–9. The files were not allowed to be taken out of the office and hence I had to photograph parts of the drawings on spot. There were no plans for the religious buildings or the Post Office available. However there was an A-4 size plan of the CMTS Office held together by cello tape in various, 2–10. The CMTS records did not have any access to the original master plan drawing according to officials.



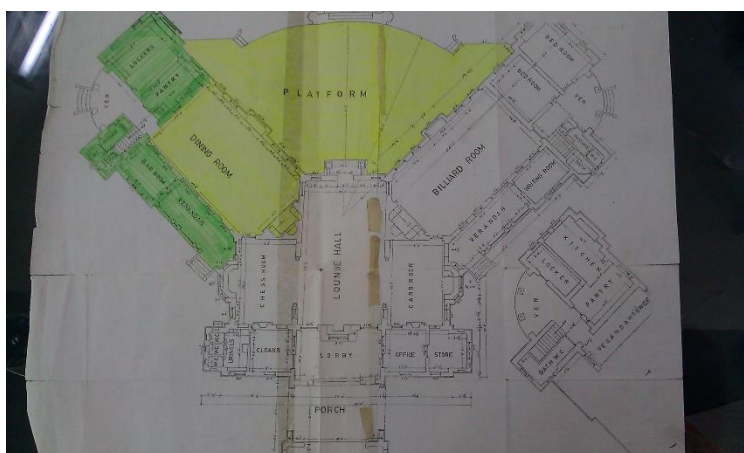
Photograph by: Shama
Anbrine
2011.

**2-8 Part of a Tracing
Cloth Drawing Sheet**



Photograph by: Shama
Anbrine
2011.

**2-9 A sample of condition
of drawings in CMTS
records**



Photograph by: Shama
Anbrine
2011.

**2-10 Plan of the CMTS
Office building**

On site documentation of the mandir and gurudwara.

In the absence of any available plans, I decided to undertake the on-site documentation of the religious buildings. This site work was conducted with the help of two architects and two civil draughtsman. In the end only Mandir and Gurudwara were physically documented. The officials of the masjid did not allow us to take any measurements on site and therefore only photographic documentation was undertaken.

The Mandir and Gurudwara are not being used as religious buildings presently. The Mandir has two sections, one of which has partially become part of a Girl's Primary School and other is part of a residence while the gurudwara is a completely residential premises. For the mandir, the administration of the School allowed us to conduct the documentation after the school hours on weekdays only, while the residents of the house did not want interior of the house to be documented hence only the exterior was accessible. The site of the mandir is completely surrounded by shops and does not give enough distance for photographing the exterior. The building itself is quite deteriorated and there is visible debris on site, 2–11. The interior space is quite narrow as well restricting use of any sophisticated equipment. Hence the documentation on site was carried out by a measuring tape, a laser distance meter and by photogrammetric techniques. The dimensions from site were recorded as a sketch on a graph paper with dimensions in English units (feet and inches) as the draftsmen were not familiar with the metric system.

The Gurudwara is presently being used as a residence, and it took quite extensive time and numerous visits to convince the residents for permission to document. Initially they were quite reluctant as they are under litigation from the *Auqaf* department of the Government of Punjab which looks after the public buildings vacated as a result of independence and is in the process of confiscating them from the illegal residents. However, after finally convincing them that this documentation was a part of a student research project and not a study conducted by the Government, they finally agreed. The documentation team and process was the same as the mandir, and it took two days to take the measurements and photographs.



Photographs by: Shama Anbrine

2011.

2-11 Debris on the Mandir site



Photograph by: Jawad Zakariya

Flickr.

2008.

2-12 Aerial View of Site of Mandir

Interviews

For this study I have met with a number of people associated with Model town including its President, Chief Engineer, Incharge Property as well as many residents and architects. My interviews with them are based on guidelines provided by Steiner Kvale⁴⁹ and Herbert and Irvine Rubin⁵⁰ using a combination of in-depth and responsive interviewing model⁵¹. Hence when I was exploring their experiences, motives and opinions, the design of the interview was quite flexible in response to what kind of feedback I was receiving. Important aspects were noted as points in a notebook. In the end, I gathered all the narratives, descriptions and interpretations from all the different people and collated them⁵².

At this point it is important to understand the setting and culture of government or other semi-government offices before conducting the interview. Although the advice given in text books on Interview techniques seems quite 'straight-forward', the reality can be somewhat different, and almost comical. There was not a single chance to interview an official exclusively owing to the fact that all officials who agreed to give me an appointment were bound to be multitasking. A standard procedure was that when I went into the office for the first time, the official would be busy talking to somebody and I was required to wait. Then in a few minutes he'll pause his discussion and shift his attention to me asking the reason I have visited. I would recall him about the telephonic conversation we had earlier (usually two days back) in which I was given the appointment. He would acknowledge and tell me to wait and in the meantime shift his attention to the first person. Meanwhile a third person arrives and the officer's attention is split between the three of us. An occasional clerk would appear at regular intervals to have some documents signed. The officer would then call for tea for all his visitors. Remembering that I was also sitting there, he would

⁴⁹ Kvale, S. (2007). *Interviews: Learning the craft of qualitative research interviewing*. London: Sage.

⁵⁰ Rubin, H. J., & Rubin, I. S. (2012). *Qualitative interviewing: The Art of Hearing Data*. London: Sage.

⁵¹ Ibid.

⁵² Rubin, H. J and Rubin, I.S. (2012). *Qualitative interviewing: The Art of Hearing Data*. p.3.

ask me again for my exact requirements and list them on a piece of paper. By this time it is almost four hours. Finally I take leave asking when to inquire again, and was generally told to inquire again by phone in two to three days. The process continued till the officer had mercy on me and finally decided to cooperate. I was aware of these shortcomings in the Government Departments as I have grown up in this culture so before every visit, I used to write a rough interview sketch of what I wanted to know, and after every visit I compared it to how much I have been able to get out of the meeting.

These meetings had their own advantages as well. I was able to meet many residents of Model Town whom I would never had met under ordinary circumstances. They felt so comfortable discussing their experiences about the Town when I was introduced officially as a researcher that I was quite touched. Consequently, I came to know about so many different aspects of the Town that I may not have known otherwise.

Similarly the elder residents of Gurudwara were also helpful in telling about the condition of the original Gurudwara that they had occupied and how much alteration had been undertaken by them. During these informal interviews, my approach was quite simple; less talking, more listening and no debating. Many a times the respondents strayed from original topic and included many irrelevant details but I just guided them slowly towards the main topic. The keenly I listened to anyone, the more they were willing to share. At the end of each day, I just applied a filter to the resultant answers as more relevant and less relevant for later use using a naturalistic or social construction approach⁵³.

Online Platforms and Social Media

One unusual source of data for this study was the use of the online photo-sharing platform, Flickr⁵⁴, and the social media platform, Facebook⁵⁵.

From Flickr, I acquired the photograph of the original plan of the Model Town c. 1937 from Emmy Eustace whose father John Curtis Weinher Eustace was

⁵³ Ibid

⁵⁴ www.flickr.com

⁵⁵ www.facebook.com

the Deputy Commissioner of Lahore at the time of independence, and this map was part of his personal papers.

Facebook has a dedicated group called 'Model Town Lahore' which is administered by an old Model Town resident who uses the pseudonym *Dastaan Go* (the storyteller). Initially it was just a platform for him to unite with his old friends from the Town but now it has over 2800 members of various age groups. I have contacted many of the senior members online and they have been an invaluable source of information about the Town in the early days after the independence.

Problems of Conducting Research in Pakistan

No research project is completed without encountering problems. Each project is unique and comes with its own set of circumstances and challenges. My study was no exception, in fact, the process was heavily influenced and delayed by many challenges beyond my control. The following discussion highlights those issues together with the difficulties that different people have come across while conducting research in Lahore. The purpose of this exercise is to give an overview of the kind of problems one should expect while planning a research project involving Lahore and subsequently, it might be helpful for future researchers for their research preparations.

Understanding the Need of Documenting History

Shakespeare's notion that "Whereof what's past is prologue, what to come / In yours and my discharge"⁵⁶ prompts us that history often sets the stage for our present actions. Documenting history, however, in the realm of space, time, heritage and political dynamics becomes a complicated question. This is perhaps the main reason that there has been so little independent history writing about Pakistan. As Dr. Mubarak Ali, one of the few independent historians of Pakistan has said:

⁵⁶ Shakespeare, W. (1610-11) *The Tempest*, Act 2 Scene 1.

Historical writing in Pakistan is, in itself, a whole other set of questions and contradictions that we, as a nation hurtling forward into a very unknown tomorrow, can no longer ignore.⁵⁷

From what Richard Barnett⁵⁸ has written about history of post-independence Pakistan it can be inferred that it has not been properly documented because of two main reasons. First “South Asian history is dominated by the study of India, at the expense of Pakistan and Bangladesh”, and second “In Pakistan, it is the fear that academic historians cannot exercise academic freedom, but must conform to the regime du jour and its paranoia.”⁵⁹ The case of pre-independence history is even more complicated. As Home has argued “Much British writing on the subject of the British Empire has been frankly celebratory and self-congratulatory”⁶⁰. This, in turn, becomes the reason why contributions by local communities remain ignored and unacknowledged. In the case of Model Town, another significant factor at work is lack of sentimental association with its history by the post-independence administration. Even by the high ranking officials of the CMTS, the history of the towns starts from the time of independence when it was declared an *Evacuee Trust Property*⁶¹. Whatever happened before the independence is not considered important enough to be remembered, or perhaps politically unsavoury, as if there was *nothing* before the creation of Pakistan. Therefore it is not strange that even after more than nine decades of existence, Model Town does not have any formally documented history. This study thus deals with some very basic questions about Model Town, like who was the founder; what the circumstances, and lines of thought from which this intriguing and rather unique town emerged; who were the people involved in realizing this idea into

⁵⁷ Ali, M. (2013). History Matters! Why the study of Pakistan’s History is in a Crisis- A Talk with Dr. Mubarak Ali. *Pakistan Today* [Karachi]. 24 July.

⁵⁸ The only scholar to run a dedicated academic program on the History of Pakistan in the world since early 1970’s.

⁵⁹ Barnett, R. B. (2008). Re-writing Pakistan’s History. *The News* [Lahore]. 23 Nov.

⁶⁰ Home, R. (1996). *Of Planting and Planning*. London: Routledge. p. vii.

⁶¹ See www.mts.com.pk/history

reality; who lived in the area. Why these questions need to be answered can be viewed in the light of two aspects.

(1) Whenever anything is written about Pakistan, it is mostly in terms of political ideology. Under these circumstances all other types of history particularly local and architectural histories becomes secondary. Without proper documentation, it provided an outlet for distortion of facts and thus replacing realities with myths.

(2) History needs to be understood for any future planning. Even if the people are not interested and have repeatedly told me that I should seek some better ideas to explore, there is still a dire need for this documentation. Under these circumstances, I have been strongly inspired from works as well as attitude towards his historiography work of Dr. Mubarak Ali, as he himself has said this several times:

So I ask myself again: who cares, anyway? Who cares about the organization of old articles in an archive when bombs are going off and there's no electricity for hours every day? But the truth is that until we start caring - until we create an educational system and a society that questions and criticizes and investigates - we won't get very far in any other matter, either. If we hope to fix the problems of the past, we need to first understand that past.⁶²

Lack of Maintained Archives

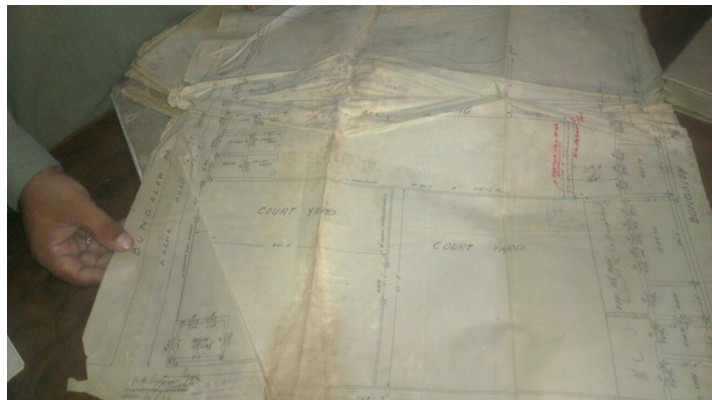
Archives exist because somebody at some point in time has believed it necessary to preserve documents of importance. So any archive is heavily influenced by four variables, (1) The keepers of the archives; (2) The point in time in which it was set up; (3) The documents that were available; (4) The archival policy of retention and disposition.

Successful archives exist because the keepers of those archives adopt the policy of:

⁶² Ali, M. (2013). History Matters! Why the study of Pakistan's History is in a Crisis- A Talk with Dr. Mubarak Ali. *Pakistan Today* [Karachi]. 24 July.

Just hand it over, everything is interesting, will be useful to some researcher, even if you don't think so; there is virtually nothing that should not be preserved.⁶³

Unfortunately, in case of Lahore, there are no systematically maintained archives. Most of the Government departments have a huge collection of valuable records which are not maintained properly and in most instances stored in basements. They have layers of dust covering them and in some cases they may be infested with termites and dampness. Lahore lies at the bank of river Ravi which is susceptible to regular flooding, and consequently much of the older data has been damaged during various flooding episodes.



Photographs by: Saleela Imran

2013.

2–13 Drawings in Lahore Cantonment Board Records

Many times the keepers of these archives, usually the high officials, do not understand the significance of maintaining archives. One such incident was the disposal of archival material from the Punjab Public Archives in a stable which was highly condemned by the educated classes⁶⁴.

⁶³ Grossmann, A. (2007). Out of the Closet and into the Archives? German Jewish Papers in Blouin Jr, F. X., & Rosenberg, W. G. ed. *Archives, Documentation, and Institutions of Social Memory: Essays from the Sawyer Seminar*.

⁶⁴ Sheikh, M. (2013). How our entire history was dumped in a horse stable. *Dawn* [Lahore] 6 Oct.

These records are not easily accessible as they require permissions from various officials through different official channels. This is a time-consuming effort which requires patience and persistence.

Even if the permission is granted the archival material is not catalogued or placed systematically and usually the researcher has to rely on the clerical staff for the provision of any document. In the post-independence Lahore the social memory of the people is confused between memories and heritage. The official sitting in an office building constructed during the Raj and living in a colonial bungalow would always guide you to the Mughal monuments of the city to understand architectural excellence. Hence the clerical staff will try to steer you away from your topic by suggesting alternatives, i.e, Mughal buildings of Lahore. This is not an exceptional case as similar problems have been identified in Geoffrey Moorhouse's travelogue to Pakistan 'To The Frontier' where he had especially visited Lahore to see Kipling's House and faced similar attitude when trying to locate it without any luck. Hence he abandoned his idea and moved forward⁶⁵.

Security 'red-tape'

In the current volatile political and security situations in the country any serious incident can block the access to records. During my first visit to Lahore in February 2011, I had to return back to the UK just after fifteen days as all the archives in Lahore had blocked access after the assassination of the Governor of the Punjab Salman Taseer in December 2010. Thus I had to reschedule the trip four months' later to undertake my primary research.

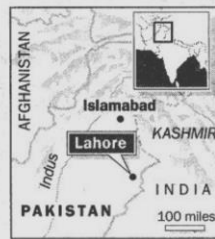
⁶⁵ Moorhouse, G. (1998). *To the Frontier*. London: Penguin Books, 152-3.

The 'Scheme' for a 'Model Town' in Lahore

Photographer: Unknown

The Times (London)

2 Sept. 2006



MODEL TOWN, LAHORE

- An affluent suburb of Lahore, home to wealthy professionals who live in stylish and spacious homes surrounded by neat private gardens
- Each block of the development has its own parks, market, playground and mosque
- Real estate values are the highest in the city
- Built in 1921, designed to solve Lahore's housing problems and to provide good sanitary and living conditions for residents.
- Population of about 100,000

3-1 Model Town

The Model Town, after some nine decades of existence, is popularly known today as 'one of the city's exclusive suburbs' and 'an enclave of wealth, where luxurious villas are surrounded by high stone walls and watched over by armed guards'¹ with a population comprising of 'rich elite, landed aristocracy, the sophisticated group of Pakistanis who live in grand mansions'².

CONTENTS

The Founder

The Scheme

¹ Lister, D. (2006). Model Town Lahore. *Times* [London]. 2 Sept. p. 8.

² Bergsma, H. M. (2008). *An Oath of Vengeance*. Bloomington: AuthorHouse. p. xiii.

The idea of a Model Town in Lahore was floated in 1919 and by 1924 its first building had been inaugurated. This chapter looks into the historical development of the Town from Diwan Khem Chand's idea to its inception. It elaborates on the life of its founder, and thus describes the lines of thought, circumstances and experiences from which the idea emerged. Hence a broad description of the proposed town is provided with reference to its salient features, the bureaucratic and public processes involved in realising the idea of this novel town, and the administrative processes and procedures in the maintenance of the Town till the time of independence.

The Founder

The name of Diwan Khem Chand, the founder of the Model Town, was lost in oblivion even before the independence. This resulted in speculation and the credit of this Idea has been given to several people in the post-independence era, notably Sir Ganga Ram³, Colonel Jamal Uddin⁴ and Sir Patrick Geddes⁵.

It wasn't until 2001 when Khem Chand's name re-emerged in Khaled Ahmed's book *Pakistan: behind the ideological mask (facts about great men we don't want to know)*⁶ followed by a detailed description in Pervaiz Vandal's

³ Sain, K. (1978). *Reminiscences of an Engineer*. New Delhi: Young Asia Publications. p. 46.

⁴ A popular anecdote narrates "In 1927 Col Jamaluddin had been posted as Civil Surgeon in Lahore. Mr Kirpalani was the Deputy Commissioner and Sardar Teja Singh was the Sessions Judge. All three Indians were posted together for the first time. With the help of a French architect who was their mutual friend, they planned the community of Model Town, as a retirement abode. Initially, Model Town was divided into three parts with a Mosque, a Temple and a Gurdwara as a center point to worship, surrounded by three blocks of housing each. Land at the center of the development was left vacant for recreation and community service centers." (the text reproduced from a blogpost by Col. Jamaluddin's daughter from <http://www.http://reluctantexpatriate.blogspot.co.uk/2008/08/colonel-jamaluddin-indian-medical.html>) Many senior officials of the Town support this story. Raza Rumi, a senior journalist in Lahore has also reblogged it. I was first told this story by Mr. Javed Uppal, a senior Government Engineer and a resident of Model Town Society, during his visit to my home in 2010. During an Interview with Col. Kardar in 2011, who was the President of the Society at that time, I was told a similar narrative.

⁵ Welter, V. M. and Whyte, I.B. (2003). *Biopolis: Patrick Geddes and the City of Life*. Cambridge, Massachusetts: MIT Press. p. 311. See Also Glover, W. (2008). *Making Lahore Modern, Constructing and imagining a Colonial City*. Minneapolis: University of Minnesota Press. p. 151.

⁶ Ahmed, K. (2001). *Pakistan-Behind the ideological mask (facts about great men we don't want to know)*. Lahore: Vanguard. p. 120.

newspaper article *The Model Town of Diwan Khem Chand*⁷. In 2003, the first annual progress report of the CMTS *The Scheme for a Model Town and its Realization* written by Diwan Khem Chand was brought to light in F.S. Aijazuddin's *Lahore recollected: An Album*⁸. The same report was used in the Model Town section in Pervaiz Vandal and Sajida Vandal's book, *The Raj, Lahore and Bhai Ram Singh*⁹. Therefore present knowledge about the formation of the Model Town is from this key text. When I tried to locate the original copy of this text, I encountered three limitations.

(1) Its original copy is not available in any public domain library and the authors of secondary sources guided me to their publications for reference¹⁰.

(2) The document as cited in secondary documents does not elaborate upon many salient aspects relating to the town and the people involved in its development remain unknown to date.

(3) There is not much known about the founder Diwan Khem Chand which in itself is quite tragic. His name has completely vanished from the CMTS records which is heart wrenching as the CMTS proudly remembers its 'sons' ¹¹ but has forgotten its founder, '*the man who had the courage to dream and the tenacity to implement it*'¹². There is no memory left of this great man as '*no street; a square or even a plaque that pays homage to the genius who brought it all about*'.¹³

Before going into the details of the Town, I have tried to develop a short biographical sketch from very limited information available about Diwan Khem

⁷ Vandal, P. (2001). *The Model Town of Diwan Khem Chand*. *The News [Lahore]*. 23 June. p.12.

⁸ Aijazuddin, F.S. (2003). *Lahore recollected: An Album*. Lahore: Sang-e-Meel. pp. 205-212.

⁹ Vandal P. And Vandal S. (2006). *The Raj, Lahore and Bhai Ram Singh*. Lahore: National College of the Arts. pp. 81-94.

¹⁰ Discussed earlier in Chapter 2.

¹¹ There is a complete webpage dedicated to prominent people who have resided in the post-1947 Model town which include the poets Faiz Ahmed Faiz and Hafeez Jullundhry, writer Ashfaq Ahmed, singer Nusret fateh Ali Khan, Mayor of Lahore Mian Amir Mahmood, Prime Minister of Pakistan Mian Nawaz Sharif and Chief Minister Punjab Mian Shahbaz Shareef. See <http://mts.com.pk/somtown.html> [Accessed 04/05/2014]

¹² Vandal P. And Vandal S. (2006). *The Raj, Lahore and Bhai Ram Singh*. p. 82.

¹³ Ibid.

Chand in an attempt to understand his lines of thoughts, circumstances and experiences which urged him to present the idea of this unique town in Lahore.

Early life

Diwan Khem Chand (1888¹⁴-unknown) was born in Sit pur¹⁵, a town in Muzaffargarh District of Punjab. He was the eldest of three sons¹⁶ of Diwan Tek Chand (1871-1927)¹⁷, a successful foreign qualified¹⁸ first generation ICS coming from an agrarian family background. There is not much known about Khem Chand's early life¹⁹ but there is a probability that he spent his early years in Sit pur, while his father was studying in Lahore and later in London and Cambridge²⁰. After his father's return from Britain in 1898, Khem Chand might have either lived in Gujranwala, Ludhiana and Gurgaon where his father served in different influential government positions²¹ or spent his time in a boarding house²² before proceeding for his higher studies to Lahore. Like his

¹⁴ This year is estimated as his exact date of birth is not known. It has been calculated from the information in Sturgess, H.A.C. (1949). *Register of Admissions to the Honourable Society of the Middle Temple, from the fifteenth century to the year 1944*. Vol. II. p. 756 where his age is stated to be 18 years in May 1906.

¹⁵ Peile, J. (1913). *Biographical Register of Christ's College, 1505-1905: and of the earlier foundation, God's House, 1448-1505*. Vol. II 1666-1905. Cambridge: Cambridge University Press. p. 770. See also Government of Punjab. (1929). *Punjab District Gazetteers. Part. 1 Muzaffargarh District*. p. 79.

¹⁶ Sturgess, H.A.C. (1949). *Register of Admissions to the Honourable Society of the Middle Temple, from the fifteenth century to the year 1944*. Vol. II. p. 756.

¹⁷ By Own Correspondent. (1927). Diwan Tek Chand. *Times* [London]. 22 Nov. p. 19.

¹⁸ Diwan Tek Chand studied at Egerton College Bahawalpur and Government College Lahore from where he completed his B.A. He passed his ICS from London in 1894, and enrolled for Bar-at-Law at Christ's College, University of Cambridge. He was called to the Middle Temple bar in 1895. See By Own Correspondent. (1927). Diwan Tek Chand. *Times* [London] 22 Nov. p. 19. The Times Digital Archive. Web. Accessed 25 June 2012. Peile, J. (1913). *Biographical Register of Christ's College, 1505-1905: and of the earlier foundation, God's House, 1448-1505*. Vol. II 1666-1905. Cambridge: Cambridge University Press. p. 770.

¹⁹ Vandal P. And Vandal S. (2006). *The Raj, Lahore and Bhai Ram Singh*. p. 82.

²⁰ See footnote 16.

²¹ Diwan Tek Chand started his ICS career in 1899 as Assistant Commissioner Gujranwala Division. See HMSO (1902) *East India (famine): papers regarding famine and relief operations in India*. 1899-1900, p. 491. By 1908 he had become the Deputy Commissioner of Ludhiana. See Sturgess, H.A.C. (1949). *Register of Admissions to the Honourable Society of the Middle Temple, from the fifteenth century to the year 1944*. Vol. II. p. 756.

²² 'As the government officers were transferred from one city to another every two years, it was a standard amongst them to send their children to boarding schools so that their education remained undisturbed. If the children accompanied them, they would live in minute rented cottages in an expensive hill station or in a government bungalow.' For details see

father, he studied from Government College Lahore (tenure unknown) and Christ's College Cambridge (1906-1909)²³. After passing his exam in Real Property and Conveyancing in Class III he was called to the Middle Temple Bar in 1911²⁴.

Khem Chand's early life have portrayed three important aspects which have had a strong reflection on his idea of a model town.

(1) He experienced an Indian upper middle class life style from a very early age in various parts of Punjab due to his father's service requirements. Among other things, he had witnessed life in government colonies living in palatial bungalows among his father's peers in many different cities of Punjab. Therefore he was well aware of the problems that local officers faced, both when undergoing a competitive process of allotment of a government bungalow and leaving a bungalows and relocating upon retirement.

(2) His education followed a typical example of what has been termed by Homi Bhabha as "the culmination of an Indian middle class trajectory of formal education"²⁵ by pursuing higher education in the UK. The aim of this education was to develop an understanding to the point of mimicry²⁶ of "the canons of elite English taste, traditions and practices"²⁷. Under these conditions, his stay abroad was not merely aimed at obtaining a reputable foreign degree to ensure good future prospects upon his return. By the aid of a foreign education, he was expected to replicate and adopt the language, clothing, culinary tastes and mannerism, as well as political and cultural attitude of the

Mehta, V. *A House Divided*. In Sidhwa, B. (ed.) (2005). *City of Sin and Splendour Writings on Lahore*. New Delhi: Penguin Books. p. 117.

²³ Sturgess, H.A.C (1949). *Register of admissions to the Honourable Society of the Middle Temple, from the fifteenth century to the year 1944*. Vol. II. p. 756.

²⁴ By Own Correspondent. (1911). Council of Legal Education. *Times* [London]. 26 Apr. p.4.

²⁵ Bhabha, H. (2012). *The Location of Culture*. 2nd ed. London: Routledge. p. x.

²⁶ "Colonial mimicry", according to Homi Bhabha, "is the desire (in the colonized) for a reformed, recognizable Other, as a subject of a difference that is almost the same, but not quite". See Bhabha, H. (2012). *The Location of Culture*. 2nd ed. London: Routledge. Accordingly mimicry in a colonized society is seen when the 'colonized' replicate and adopt the language, clothing, culinary tastes and mannerism, as well as political and cultural attitude of their 'colonizers'.

²⁷ Bhabha, H. (2012). *The Location of Culture*. 2nd ed. p. x.

British as these qualities were quasi-essential for his bright future in colonial India.

(3) Khem Chand conceived the idea of a Model Town during his stay in England²⁸. The main reason was clearly the fact that the time of his stay (1906-1911) was an important era for urban development in the west. The year 1909 has been marked as a benchmark year for Urban Planning in the US and the UK.²⁹ It marked the First National Conference on Urban Planning held in Washington D.C. in 1909³⁰ where leading urban planners and thinkers of the time like Geddes and Howard presented their ideas. Until then, Urban planning was not a specialized field at that time and therefore many urban visionaries and town planners active in the UK as well as in the colonies came from varied professional backgrounds beyond architecture³¹; e.g. Ebenezer Howard (later Sir) was a law-firm clerk while Patrick Geddes (later Sir) was a biologist. This might have motivated Khem Chand to venture in as an urban visionary. This conference paved path for introducing urban planning as a specialized degree course. To facilitate this need, the British Parliament passed the Housing and the Town Planning Act in 1909³², and as a result first-ever School of Civic Design was established in the University of Liverpool.³³ Hence, it can be argued that his stay in England at that time might have given him the opportunity of observing all these developments as a part of his studies which included a specialisation in Real property.³⁴ However there is no further evidence to supplement this claim.

²⁸ Chand, D.K. (1930). *The Scheme for a Model Town and its Realization*. as cited in Vandal P. And Vandal S. (2006). *The Raj, Lahore and Bhai Ram Singh*. p.84.

²⁹ Scott, M. (1969). *American City Planning Since 1890*. Berkeley: University of California Press. p.100.

³⁰ Ibid.

³¹ Home, R. (1997). *Of Planting and Planning*. London: Spon. p.52.

³² Morris, E. S. (1997). *British Town Planning and Urban Design. Principles and Policies*. London: Longman. p.45.

³³ Crouch, C. (2002). *Design Culture in Liverpool, 1880-1914: The Origins of the Liverpool School of Architecture*. Liverpool: Liverpool University Press. p.152.

³⁴ According to Sturgess, H.A.C (1949). *Register of admissions to the Honourable Society of the Middle Temple, from the fifteenth century to the year 1944*. Vol. II. p. 756.

Life after Return from the UK

Upon return Khem Chand worked for some time as an Honorary Secretary for Muzaffargarh Central Bank (tenure unknown)³⁵ and later lived in Baroda around 1920³⁶. His corresponding address in Government letters written during 1921 was Fane Road Lahore³⁷, an area where many independent lawyers had their chambers and offices³⁸. His name does not appear in any public record with reference to government service, therefore is highly probable that he practiced as a private barrister for living. Meanwhile, he had started working on his proposal for a new suburban town around 1918-19; an idea which later become his full time passion for the coming years.

The Scheme for a Model Town

Khem Chand compiled his initial thoughts into a pamphlet titled 'Suburban Town of Lahore' in 1919³⁹. In this pamphlet he outlined the desirability of a 'suburban town' and its proposed salient features under the title 'My Scheme'. Lahore was a natural selection for the location of this town. Being the headquarters of the Punjab Government, and an important centre of commercial, educational and social activities in North India, According to him '*a large number of Punjabis desired, and in many cases have of necessity, to live there*'⁴⁰.

This town was to be an '*Ideal Self-contained Town*'⁴¹ ; by which he implied '*a town with all the conveniences of modern times*'⁴² where '*middle class men, whose incomes*' were '*fixed and who by their better training, education and*

³⁵ Ullah, A. (1937). *The Co-operative Movement in the Punjab*. London: G. Allen and Unwin. p.318.

³⁶ Unknown Author. (1920). *Christ's College Boys Home and Club Report*. (Annual Report). Cambridge: Cambridge University Press. (No Pagination).

³⁷ Chand, D.K. (1922). *The Model Town. Part I*. Lahore: Punjab Central Press. p.37.

³⁸ Anand, S. (1998). *Lahore, Portrait of a lost City*. Lahore: Vanguard Books. p. 238 and Singh, K. (2003). *Truth, Love and a Little Malice: An Autobiography*. New Delhi: Penguin Books. p.86.

³⁹ Chand, D.K. (1922). *The Model Town. Part I*. Lahore: Punjab Central Press. p. 2.

⁴⁰ Chand, D.K. (1922). *The Model Town. Part I*. p. 1.

⁴¹ Chand, D.K. (1922). *The Model Town. Part I*. p. 2.

⁴² Ibid.

social position' desired *'to live a better life'*⁴³. Hence by provision of *'cheaper, cleaner and more comfortable houses'* they would be able to lead *'better, healthier, happier and longer lives'*⁴⁴. The idea of this town was to be realized by *'combination, organization, co-operation and mutual good will'*.

From the very beginning, this was a novel idea as it emphasised emerging new concepts influencing urban planning and architecture. Modern and modernization become two central issues of inquiry defining the social purpose of architecture and planning for a family life in terms of happiness, health and comfort similar to post-industrial revolution urban planning in the western world.⁴⁵ The targeted middle class was not the one formed as a result of prevalent intricate social geometry of a variety of castes, religions and trades. Instead it was formed by a cosmopolitan group of individuals who thought that they were superior to the indigenous masses due to their *better training, education and social position*⁴⁶. There were financial constraints as their incomes were fixed, but they were not willing to compromise the living standards. Under these conditions, co-operation combined with self-help was perhaps the best method to achieve these goals. The ideas of co-operation were not just limited to the physical development of the area and administrative process, but another dimension for their application was the moral character of the area. (The detailed features of this scheme would be discussed later in this chapter).

His second circular dated 8th January 1921 amended the description of the town to a *'Self-contained Co-operative Garden Town in the Suburbs of Lahore'*⁴⁷. The town, was later named the Model Town, which was initially a temporary name and a committee was formed to finalize a suitable name⁴⁸.

⁴³ Ibid.

⁴⁴ Ibid.

⁴⁵ Jeremiah, D. (2000). *Architecture and Design for the family in Britain 1900-70*. Manchester: Manchester University Press. pp.1-4.

⁴⁶ This superiority complex was inflicted upon them by the colonial rulers who found it easy to deal with the 'English-knowing urban-centric' rather than the 'unwashed masses'. For details See Varma, P.K. (2007). *The Great Indian Middle Class*. New Delhi: Penguin Books. p.14.

⁴⁷ Chand, D.K. (1922). *The Model Town. Part I*. p.15.

⁴⁸ Chand, D.K. (1922). *The Model Town. Part I*. 29.

However, probably the committee could not decide upon a suitable name and consequently this name has prevailed ever since.

In the following five years Khem Chand struggled hard to get support for his venture from the Government and prospective residents of the area. (Discussed in detail in the next chapter). His efforts received great admiration from early members of CMTS. He has been described as an *enthusiast* and *energetic* secretary of the Model Town⁴⁹, and as a man “*whose heart was larger than his enormous tribe of relations, and whose natural community spirit brought into being a modern housing estate*”⁵⁰. His efforts were highly praised even by the Governor of the Punjab at the inauguration of the first building of the Town in April 1924.⁵¹ However soon after its inauguration the town started having considerable problems (discussed in detail in the next chapter). As a consequence in 1932 he was removed from his post of Secretary owing to severe corruption charges⁵². This was perhaps the most likely reason why his name started to vanish from the records of the CMTS⁵³. Nevertheless, the Model Town gave him a lasting reputation as seen from the Government publications where his name was followed by expressions such as “*of the Model Town*”⁵⁴ and “*of the Model Town fame*”⁵⁵.

⁴⁹ By Own Correspondent. (1922). Lahore's Model Suburbs, Settlement of Land Acquisition, Solid Progress. *Civil and Military Gazette* [Lahore]. 19 May. p. 14. and By Own Correspondent. (1924). Lahore's Model Town, Foundation Stone of First Building Laid. *Civil and Military Gazette* [Lahore]. 12 April. p.10.

⁵⁰ Bedi, F. (1972). *Memories of Achariya Raghuvira*. Sikkim: Luxlapiz. pp. 17-18.

⁵¹ By Own Correspondent. (1924). Lahore's Model Town, Foundation Stone of First Building Laid. *Civil and Military Gazette* [Lahore]. 12 April. p.10.

⁵² Ullah, A. (1937). *The Co-operative Movement in the Punjab*. pp. 318-320.

⁵³ This is probably the reason that Kanwar Sain who remained the president of the CMTS from 1944-47 did not mention Khem Chand's name as the founder. Sain, K. (1978). *Reminiscences of an Engineer*. New Delhi: Young Asia Publications. p. 46.

⁵⁴ Government of Punjab. (1931). *Punjab District Gazetteer. Part I. Muzaffargarh District. 1929*. Lahore: Superintendent Government printing. p.79.

⁵⁵ Government of Punjab. (1937). *Report of the Punjab Unemployment Committee*. Lahore: Superintendent Government Printing. p. 30.

Later Ventures

After his removal from the CMTS he worked as the Development Secretary to Northern India Flying Club⁵⁶. In 1938 when the Government proposed giving land for co-operative farming to unemployed educated people, he proposed a scheme of developing agricultural colonies for the educated unemployed people.⁵⁷ It was another idealistic and optimistic scheme, however, it did not receive similar appreciation as the Model Town.⁵⁸ Later in 1939 he was appointed as a member of the sub-committee on National Housing on the National Planning Committee of India⁵⁹.

There is not much known about him afterwards. Although the records held by Christ's College Cambridge show his address as Model Town Lahore from 1929 to 1963⁶⁰, most likely he migrated to India in 1947⁶¹. Afterwards, his name has appeared in two sources only. One was a letter by him from New Delhi published in Letters to the Editor section of *Thought* Magazine in 1951⁶². In the letter which was titled "Beautifying Greater Delhi" he proposed that as the capital of *Bharat* Greater Delhi should have a distinctive personality. Hence In order to create the right environment for health and happiness of the inhabitants, Greater Delhi should be developed by building houses having "pipe water, electric connection, sanitary fittings and various labour saving

⁵⁶ Map of *The Model Town* dated 1937 (Annexure 1) is signed by Khem Chand under his position as the Development Secretary of Northern India Flying Club alongwith K.C.Verma as the Secretary.

⁵⁷ Chand, D.K. (1938). *Progress of the Colonization Scheme to End Unemployment*. Lahore: Punjab central Press. p. 2; Unknown Author. (1933). A Scheme to End Unemployment. *The Servant of India* (edited by Vaze, S.G.) [Pune, India] 6 Oct. p. 502. Government of Punjab. (1937). *Report of the Punjab Unemployment Committee*. Lahore: Superintendent Government Printing. p. 30.

⁵⁸ Government of Punjab. (1937). *Report of the Punjab Unemployment Committee*. p. 30.

⁵⁹ By Own Correspondent. (1939). Dewan Khem Chand. *The Times of India* [Bombay]. 15 July. p.15.

⁶⁰ This information was provided by the Librarian of Christ's College Cambridge with reference to Unknown Author. (1920-1963). *Christ's College Boys Home and Club Report*. (Annual Report). Cambridge: Cambridge University Press. 1963 was the last report available where Dewan Khem Chand was mentioned.

⁶¹ According to the CMTS records all the Hindu and Sikh population of the Town migrated to India in 1947. (discussed earlier in Chapter 1)

⁶² Chand, D.K. (1951) Beautifying Greater Delhi. *Thought*. [Delhi]. Volume 3. p. 468.

devices and gadgets”⁶³. For each house there was proposed some open space for garden and some workroom to be used for some spare-time home industry to “open avenues of employment” by providing sites of industry⁶⁴. The lines of thought were a broader version of his Model Town idea implemented in Lahore. Interestingly, a Model Town was developed in Delhi in the 1960’s, however, I have been unable to find any connection between Model Town Delhi and Diwan Khem Chand. Last time his name got mentioned was in the acknowledgements section of Sita Ram Kohli’s book *Trials of Diwan Mul Raj* (1971) for “going through portions of the vernacular evidence and comparing it with the English translation”⁶⁵, which is a popular respectable retirement project for a foreign qualified Punjabi lawyer even today.

The Scheme

Khem Chand’s Scheme for a suburban Town was a unique composition of ideas which tried to amalgamate modern ideas of living prevalent at that time along with traditional and cultural norms of the Indians. Individually the ideas were not unique and unheard-of as he himself has written in one of his pamphlets,

The Main features of My Scheme do already exist in one shape or another in some Towns. I have only brought all the good points together and the only new feature in the Scheme is the co-operative spirit that underlies it.⁶⁶

In this context, the following discussion analyses the key features of his scheme and their inspirations within the broader context of Lahore and twentieth century urban planning.

Location of the Proposed Town

The proposed location of the town was determined on the basis of accessibility from Lahore and thus it was to be ‘*within easy reach of Lahore, say within 6 or*

⁶³ Ibid.

⁶⁴ Ibid.

⁶⁵ Kohli, S. R. (1971). *Trial of Diwan Mul Raj*. Patiala Punjab: Languages Department. p. iv.

⁶⁶ Chand, D.K. (1922). *The Model Town. Part I*. p. 26.

7 miles of it⁶⁷. For this purpose a site of 1000 acres was required for which Khem Chand proposed purchasing agricultural or waste land on the outskirts of the city. The proposed town would offer '*all the conveniences of modern times*' and be '*self-contained*'. By doing this the town, designed to accommodate 5000 persons, would be able to '*meet all the necessary requirements of its inhabitants*'⁶⁸

Co-operation

For administrative purposes each house owner of the town was required to own at least one share in the town and it was proposed that the Town Company would be registered under the Co-operative Societies Act or the Companies Act '*preferably the former*'.⁶⁹ The reasons for opting for cooperative societies was very beneficial as these were exempted from '*payment of income-tax and super-tax upon all profit, other than their income from securities*'.⁷⁰

It was the idea of co-operation which led to the superlative praise attributed to the town. Model town was the first complete co-operative housing society of India and hence in its earlier days a superlative praise was an essential part of the books written on co-operation in Punjab or India clearly depicting the initial enthusiasm that followed its formation. Earliest compliments were extracted from the *Annual Reports of Co-operative Societies in the Punjab* by Bhatnagar, a Lecturer in Indian Economics at University of Allahabad⁷¹. Later Sir Malcom Darling, one of the pioneers of Co-operation in India, regarded it as an "important new type" of co-operative credit societies⁷². Gupta, a Lecturer of Economics and Sociology at Lucknow University, named it "the most

⁶⁷ Chand, D.K. (1922). *The Model Town. Part I.* p.2.

⁶⁸ Ibid.

⁶⁹ Ibid.

⁷⁰ Punjab Co-operative Department. (1945). *Consolidated Circulars of the Co-operative Department.* Lahore: Superintendent, Government Printing. p. 32.

⁷¹ Bhatnagar, B.G. (1927). *The Co-operative Organization in British India.* Allahabad: Ram Narain Lal. p. 184-5.

⁷² Darling, M.L. (1928). *The Punjab Peasant in Prosperity and Debt.* 2nd ed. London: Oxford University Press. p. 278.

ambitious and far-reaching scheme of housing on co-operative lines”⁷³, Talmaki, Honorary Secretary of Provincial Co-operative Institute Bombay, described it as “the most interesting experiment”⁷⁴ while Gammans (later Sir), a British politician, perhaps offered the finest comments as

If a criticism is offered of the Lahore Model Town from co-operative point of view, one can pay a genuine tribute to the promoters both in planning of the area and the manner in which the plan is executed. They have shown a breadth of vision...⁷⁵

Density of the Proposed Town

The proposed town was to accommodate 5000 residents, and some 7000 servants and their dependents⁷⁶, thus giving a density of 12 persons per acre or one house per acre (including a separate servant quarter within the plot). This density lies amid the Government officers’ residential areas (one house per 7 acres with servant accommodation in separate outhouses) and the city proper area (60 houses per acre (with servants accommodated in the same residential building). This figure is also lower than Temple’s design of Jamshedpur where he provided 12 units per acre balancing 1 ½ acres of

⁷³ Gupta, R.B. (1930). *Labour and Housing in India*. Calcutta: Longmans Green and Co., pp. 213-215.

⁷⁴ Talmaki, S.S. (1931). *Co-operation in India and Abroad*. Mangalore: Basel Mission Press. p.126.

⁷⁵ Gammans, L.D. (1933). *Report on Co-operation in India and Europe*. Singapore: Government Printing Press. p. 96-98.

⁷⁶ John O’Brien, Curator Post 1858 India Office Records at the British Library, has given an insight into lives of the Civil servants with reference to Lee Commission Report 1923-4. He mentions various servants like head boy, ayah, cook, paniwallah, sweeper, chauffeur, dhobi, mali, etc. With reference to an anonymous professor he stated that he and his wife had four personal servants (personal boy, driver, sweeper and dhobi) and employed a typist.

<http://britishlibrary.typepad.co.uk/untoldlives/2012/02/family-budgets-in-1920s-india.html>

The role of these servants can be viewed under two different viewpoints. British context generally details out anxieties about social relationships with South Asian servants as they are seen and treated as outsiders to the family. See Buettner, E. (2004). *Empire Families*. Oxford: Oxford University Press. p. 10. whereas important studies in the South Asian context highlight the servants as somewhat central figures in the family. See Price, P.G. (2004). Kin, Clan, and Power in Colonial South India. *Unfamiliar Relations: Family and History in South Asia*. Chatterjee I. (ed.). New Brunswick, N.J.: Rutgers University Press. pp. 192–221; Banerjee, S.M. (2004). *Down Memory Lane: Representations of Domestic Workers in Middle-class Personal Narratives of Colonial Bengal*. *Journal of Social History*. Vol. 37. pp. 681–708.

bungalows with a $\frac{1}{4}$ acre of quarters⁷⁷. The density also illustrates that being the first venture of properly developed vernacular settlement, Khem Chand could propose a very generous figure for house density in the absence of any prevailing legislations unlike England where upper and lower limits were implemented for Garden city ventures as between 8 to 14 houses per acre, or gross 12 houses per acre⁷⁸. Later, however, he did find it difficult to convince the Government authorities and in the final plan it was increased to an average of 2 houses per acre (discussed in the next chapter).

Houses

Taking an average family to consist of 5 persons, Khem Chand calculated that one thousand houses would be required to accommodate his proposed population of 5000 persons⁷⁹. For the design of these houses he proposed four basic features.

1. Each house would be detached (or semi-detached in case of smaller houses) from the others and designed like a bungalow with some garden around it.⁸⁰
2. The houses would be divided into three classes. These classes were named alphabetically in a descending order with respect to size, **3-2**.⁸¹
3. The houses would not be of the same type. Hence it was proposed that different designs and plans of each class of houses would be prepared and before the construction of the house the intending buyer were to be given the option of selecting any plan that met their '*tastes, pockets and requirements*'.⁸²

⁷⁷ Sinha, A and Singh, J. (2011). Jamshedpur. Planning an Ideal city in India. *Journal of Planning History*. 10(4). p.270.

⁷⁸ Unwin, R. (1912). *Nothing Gained by Overcrowding*. London: P.S. King and Sons. p. 20.

⁷⁹ In a footnote he further elaborated, 'Taking the servants and their dependents into account the total population of the Town would be between 10 and 12 thousand.' See Chand, D.K. (1922). *The Model Town. Part I*. p. 2.

⁸⁰ Chand, D.K. (1922). *The Model Town. Part I*. pp. 2-3.

⁸¹ Ibid.

⁸² Chand, D.K. (1922). *The Model Town. Part I*. p.3.

4. Regardless of the design chosen, one common denominator for these designs was the proposal of double storeyed houses⁸³.

These propositions highlight Khem Chand's approach to the development of a new town based on colonial experiences. The colonial bungalow was the chief inspiration for house design especially with reference to open spaces and gardens around the houses. The houses in the proposed town would incorporate some aspects of bungalows, like a garden surrounding the house and constructing detached buildings. In smaller houses, there was a provision of constructing semi-detached buildings so that the owner of the houses could use the space available to them, which was much smaller than the other two categories, to their fullest.

The class allocation of different types of houses is another aspects which has been inspired from the British developments where it was a dominant feature. However, this class allocation was in accordance to the size of the plot only in contrast to the Government developments where it symbolized professional segregation too.⁸⁴

At the same time, it was foreseeable that land was a precious commodity and therefore it was not possible to achieve the densities prevailing in the British developments. For example, in Lahore, a Government bungalow covered an area between one to four acres⁸⁵ whereas the bungalows proposed in the Model town were considerably smaller than the Government Bungalows as the maximum plot size was 0.5 acres (later 0.75 acres), **3-2**. The proposed density in residential sector in the new town was three houses (later two houses) per acre, **3-2** , which is higher than the Government residential areas but considerably lower the city proper areas where the density was 50 houses per acre⁸⁶.

⁸³ Ibid.

⁸⁴ The bungalows in India, which were usually allotted to Government officers on the basis of their ranks, were generally categorized alphabetically according to their size and covered area. For details see King, A.D. (2006). *Colonial Urban Development: Culture, Social Power and Environment*. London: Routledge. pp. 249-251.

⁸⁵ Discussion with Incharge Estates Municipal Corporation Lahore, June 2011.

⁸⁶ Sullivan, B.M. (1929). *Punjab P.W.D Paper No. 79*. p. 3.

Sr. No.	Category of House	Type of building	Area of the Plot ¹		Cost per House ²	
			kanal*	acres	Rs.	£ (eq.)**
1.	A-Class	Detached	4.0	0.50	9000-12000	600-800
2.	B-Class	Detached	2.5	0.31	6000-8000	400-533
3.	C-Class	Semi-detached	1.5	0.19	4000-5000	266-333

Proposed House Types

This Table has been drawn from statistics and figures as mentioned in Diwan Khem Chand's first pamphlet 'Suburban Town of Lahore' (1919).

Sr. No.	Category of House	Type of building	Area of the Plot ¹		Cost per House ²	
			kanal*	acres	Rs.	£ (eq.)**
1.	A-Class	Detached	6	0.75	12000-16000	1200-1600
2.	B-Class	Detached	4	0.50	8000-12000	800-1200
3.	C-Class	Detached	2	0.25	6000-8000	600-800

Finalized House Types in Model Town (1922)

This Table has been drawn from statistics and figures as mentioned in Preface of the book The Model Town (1922).

^{1 & 2} The original text mentioned area in kanal and cost in Rs. only.

* For area conversion 1 acre is equal to 8 kanal.

** Before 1920, the value of one rupee was equivalent to 1 shilling and 6 deniers, making £1 equal to Rs. 15. In 1920, the value of one rupee was increased to two shillings, thus £1 became equal to Rs. 10.⁸⁷ Hence the £ equivalent has been calculated keeping this exchange rate in consideration.

3-2 House types in Model Town

⁸⁷ Dadachanji, B. E. (1927). *History of Indian Currency and Exchange*. 2nd ed. Bombay: D. B. Taraporewala Sons and Co. pp.115-6.

This density was also quite generous when compared to England where upper and lower limits were implemented for Garden city ventures as between 8 to 14 houses per acre, or gross 12 houses per acre⁸⁸. This proposition in itself is quite futuristic too as there was no legislation available with reference to Town Planning in Punjab until 1922⁸⁹, Khem Chand had the opportunity of proposing a density which was affordable and acceptable by the prospective residents.

Two major differences between the government bungalows and the houses in the proposed town were the availability of different house designs and compulsion of constructing double storeyed buildings. The Government bungalows followed standard prototype designs and were single storeyed.⁹⁰ In this context this approach not only offered the prospective residents to tailor their house design according to their needs and circumstance, but also provided them with an opportunity of maximizing their land use. As observed by H. V. Lanchester in 1942, this approach was adopted by the Government in later bungalows when the size of site was reduced due to rise in land prices⁹¹. These house types are discussed in detail in Chapter 8.

Idea of a Suburban Town

From the area and proposed population, the proposed town was 1/6th the size of the limits set by Ebenezer Howard for the Garden City⁹², 3–3. Located within an accessible distance from the centre of the city, the proposed town was more in line with an English upper middle-class suburb of nineteenth century than a Garden city. While it was considered ‘inadequate professional preparation’ to confuse the garden city with a suburb, this confusion was actively prevailing in the town planning circles even in the UK⁹³. This was because the Garden

⁸⁸ Unwin, R. (1912). *Nothing Gained by Overcrowding*. London: P.S. King and Sons. p. 20.

⁸⁹ Sullivan, B.M. (1929). *Punjab P.W.D Paper No. 79*. p. 3.

⁹⁰ King, A.D. (1972). *Bungalows, Production of a Global Culture*. London: Routledge.

⁹¹ Lanchester, H.V. (1942). Architecture and Housing in India. *Architectural Design and Construction*. May 1942. p. 95.

⁹² Ebenezer Howard set the limits of the total area of a Garden city as 6000 acres with a population of 30,000 residents (and 2000 workers). See Howard, E. (1902). *Garden Cities of Tomorrow*. London: Swan Sonnenschein and Co. p. 30.

⁹³ According to Lewis Mumford ‘No one who has grasped Howard’s realistic understanding of the function of the city could possibly confuse the garden city or the new -town with a suburb’. Lewis Mumford in Osborn, F.J and Whittack, A. (1963). *New Towns*. London: McGraw-Hill, 3.

Cities built in the UK, like Letchworth, were built on an open pattern with ample private gardens and their population was much below the 30,000 people limit as proposed by Howard.⁹⁴ Garden suburbs as a town entity also emerged in the UK where only the residential aspect of the garden cities was implemented.⁹⁵

In this context of the Model Town, however, the interpretation could be more related to the circumstances as well as the confusion in the interpretation of the ideas.

(1) The scheme was focussed on a new emergent middle-class which distinguished itself from the masses due to its westernized education. Their desires were based on what they had witnessed in adopting the lifestyles of their colonial rulers. Accordingly they anticipated exclusive residential area, similar to what they had witnessed in British residential areas of Lahore, i.e. the Civil Station and the Cantonment.

(2) This class, also known as the Brown Sahibs, comprised of a very small number of people. e.g. The number of native ICS (which were a primary focus of Diwan Khem Chand for membership of his proposed town, discussed later in detail) in entire India reached to a figure of 1000 in 1930. Therefore the proposed population of the town was a considerably higher-end figure.

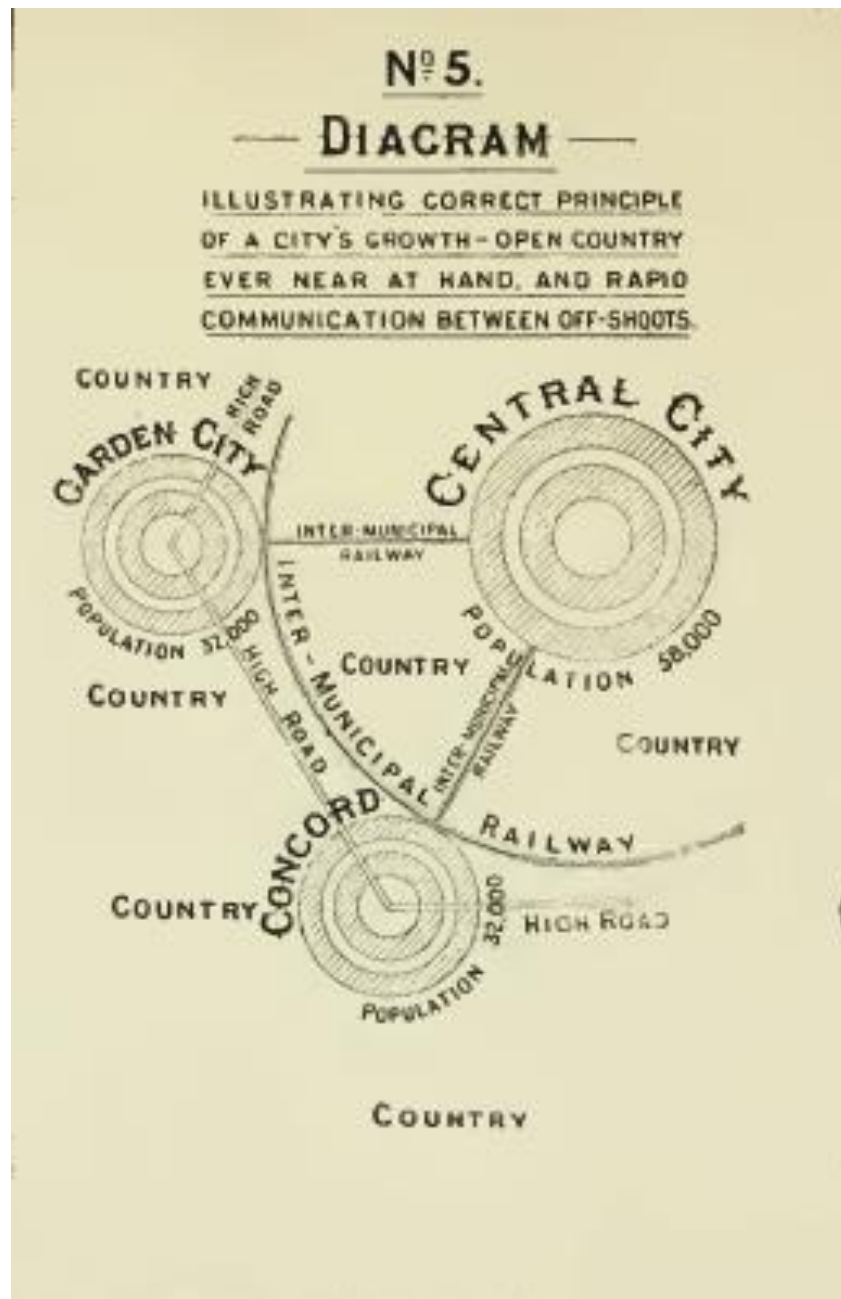
(3) Within this small number of people, Khem Chand was not even sure whether his ideas would receive any positive response from people as he later wrote in 1920.

It was with considerable diffidence that, some months back, I published my Scheme ... I was afraid lest the scheme be considered very much in advance of the times, and get ignored or laughed out by the unimaginative people who only believe a thing after they actually see it in existence.⁹⁶

⁹⁴ Lewis Mumford in Osborn, F.J and Whittack, A. (1963). *New Towns*. London: McGraw-Hill. p.3.

⁹⁵ Hollow, M. (2011). Suburban Ideals on England's Interwar Council Estates. *Journal of the Garden History Society*. 39: 2 (2011). pp. 203-217.

⁹⁶ Chand, D.K. (1922). *The Model Town. Part I*. p. 15.



Drawn by: Ebenezer Howard

Garden Cities of Tomorrow (1901):128

c. 1897.

3-3 The Garden City

Ebenezer Howard's Garden City called for an area of 6000 acres (1000 for the Garden City and remaining as agricultural land on the periphery) for a population of 32000 (30000 residents and 2000 workers)

(4) Irrespective of the desire for living in an exclusive town, Khem Chand had rightly anticipated that the residents could not dissociate themselves from Lahore as their daily functions like work, business, education, government, and all manner of other social activities were dependent on the city.

Therefore, while we see him refining the name of his proposed town as a 'Self Contained Co-operative Garden Town'⁹⁷ its description always followed the phrase 'in the suburbs of Lahore.'⁹⁸

(5) There is a slight chance that some ambiguities may have arisen due to literal translation of the terms suburb and outskirts. While these are two distinct terms with different meanings in English their relative translations in Urdu, *mazafaat* and *gird-o-nawah* (both used to denote surrounding areas in general) respectively correspond to terms which are of a relatively similar meaning and at times used as synonyms to each other.

It is interesting that despite its shortcomings and deviations from the basic garden city principles, it was and still is regarded as one of the best garden cities⁹⁹. According to Glover, it was perhaps better than Howard himself could have accomplished¹⁰⁰. Transformation of this British idea into a hybrid paved path for its implementation in a society which wanted to modernize without giving up on some features of its own culture and society.

Being and Becoming 'Modern Indians'

A town with all the conveniences of modern life was a step in the quest of being and becoming modern which was inspired from a combination of practical and innovative ideas prevailing in the western world as well in the colonial residential developments at home in the early twentieth century. Before going into the details of this section, it is important to highlight that being 'modern' in Indian context was (and still is) slightly different than how modernism was (and is) regarded in the western world. Western concept of

⁹⁷ Ibid

⁹⁸ Ibid

⁹⁹ See Chapter 1.

¹⁰⁰ Glover, W.J. (2006). *Making Lahore Modern Constructing and Imagining a Colonial city*. p. 154.

modernism suggests 'modernness or a sense of forward-looking contemporaneity'¹⁰¹. Modernist thinkers, designers and artist were 'consciously engaged in a crusade to change the world for the better, to create a more just society, to house (or rehouse) large sectors of the population and to create living experiments that were visible and material expressions of those beliefs'¹⁰². Technology was an integral part of modernism but core efforts were aimed at creating "a synthesis combining existing and continuing traditions of culture and society with the new perspectives, methodologies, and structures of modernity"¹⁰³ hence the rejection of the continuities of tradition¹⁰⁴. Embedded in the humanism and rationalism of the Renaissance, (which had placed Man, not God, in the centre of the universe and made him measure of all things) the doctrine of the Modern movement, among other things, also called for starting everything, god-like, from scratch¹⁰⁵. In order to understand Indian modernism, the term 'modern' has to be understood in three contexts; modernity, modernization and modernism¹⁰⁶. These are three complicated but distinct phenomenon which are fundamental to historical understanding of the 'modern' India;

(1) *Modernity, as a social and intellectual project;*¹⁰⁷

(2) *Modernization, as its means, are associated with the influence in India of Europe and of Enlightenment rationality from the eighteenth century onwards;*¹⁰⁸

(3) *Modernism, as an aesthetic, is far more limited in period and scope.*¹⁰⁹

¹⁰¹ Wilk, C. (Ed.). (2008). *Modernism: Designing a New World, 1914-1939*. London: V & A Pub. p.13.

¹⁰² Wilk, C. (Ed.). (2008). *Modernism*. p.21.

¹⁰³ Voll, J. O. (2010). *Modernism: Oxford Bibliographies Online Research Guide*. Oxford University Press. p.3.

¹⁰⁴ Ibid.

¹⁰⁵ Mumtaz, K.K. (1999). *Modernity and Tradition*. Karachi: Oxford University Press. p. 35.

¹⁰⁶ Chaudhari, S. (2010). Modernisms in India. *The Oxford Handbook of Modernisms*. p.942.

¹⁰⁷ Ibid.

¹⁰⁸ Ibid.

¹⁰⁹ Ibid.

In many ways, it was the process of modernization that paved way for a 'modern' India. This process was more focussed on achieving progress by using technology and acquiring western education. While an integral part of this process of modernization is 'colonisation of taste', but there are several noteworthy aspects which make its interpretation beyond the usual notion of colonisation. Noteworthy amongst it is the fact that moment this modernization started to jolt the core values and social aspirations by virtue of which a certain group of people could exercise superiority over others due to their religion, social class, occupation or gender, this modernization would revert back to traditional roles in order to protect the society from moral corruption. Thus, as Geeta Kapur has argued:

Modernism has no firm canonical position in India. It has a paradoxical value involving a continual double-take. Sometimes it serves to make indigenise issues and motifs progressive; sometimes it seems to subvert . . . tradition. Thus paradoxically placed, modernism in India does not invite the same kind the same kind of periodization as in the west.¹¹⁰

This provides a foundation for Jyoti Hosagrahar's idea of *indigenous modernities*¹¹¹. In the same context, Khem Chand's ideas can be seen in the light of two major ideologies;

- (1) A 'techno-scientific' modernism which was interested in implementing latest scientific progressions and inventions in urban planning. This part of urban development, though quite innovative for its time, was already present and actively working in Jamshedpur where facilities like electricity for general use and electric fans in houses, proper sanitation, water supply, public toilets, hospital, schools, clubs and public amusement, public safety and conveyance, hotel, town hall and bank, rest house for coolie women, grain distribution and co-operative societies were provided as early

¹¹⁰ Kapur, G. (2000). *When Was Modernism? Essays on Contemporary Cultural Practice in India*. New Delhi: Tulika Books. p. 292.

¹¹¹ Hosagrahar, J. (2005). *Indigenous Modernities*. London: Routledge.

as 1918.¹¹² Even more progressive ideas like a recreational hill station was also under discussion which had seemingly influenced the design proposal of Model Town¹¹³. (Discussed later in detail)

- (2) An inherently 'anxious' modernism which was deeply embedded into intricate cultural traditions that restricted the role of certain classes of the society, particularly women, as active members of the society.

The techno-scientific modernism of the proposed town can be seen in the light of health and sanitation, leisure facilities, use of latest inventions like electricity and concrete, and the telecommunications and shopping facilities.

Water Supply, Health and Sanitation

The town was proposed to have its own Water Works, provide better toilet facilities within the houses, and eliminate the need of keeping animals within the house by providing a dairy farm, together with an agricultural farm and a hospital. Provision of services like water and electricity was the responsibility of the Government. However, the Cooperative Societies' regulations enabled the individual societies to produce and supply their own water and electricity to reduce its burden. This was compensated by tax levy. Thus Khem Chand proposed laying water to every house so that there would always be a plentiful supply of good clean water for the house and the garden.¹¹⁴ He also proposed replacing the Indian privy system which was *unsightly, unclean and unhealthy and causes spread of various diseases* with the privies as used in the Western countries which used flush system.¹¹⁵

The upkeep of cows and buffaloes in the adjacent to every house was insanitary and troublesome, yet the people were obliged to keep them there as they did not trust the purity of the milk available in the Bazaar. Hence Khem Chand proposed an up-to-date, well equipped dairy, where the cattle would

¹¹² Lovat, F. (1919). *Iron and Steel in India; A Chapter in the Life of Jamshedji N. Tata*. Bombay: The Times Press. pp. 90-96.

¹¹³ Ibid. p. 92.

¹¹⁴ Chand, D.K. (1922) *The Model Town* Part I, 2.

¹¹⁵ Chand, D.K. (1922) *The Model Town* Part I, 3.

be properly kept and properly fed. It would be able to supply pure milk, butter, ghee and other dairy products to every house whenever required.¹¹⁶ He also proposed an agricultural farm for supplying fresh vegetables. The farm was to be equipped with modern facilities to dry vegetables in a clean and hygienic manner and would also comprise of a fruit farm.¹¹⁷ In addition, an up-to-date hospital with a qualified doctor was also proposed for the Town. The doctor, in addition to treating patients, was also suggested to undertake the responsibilities of the health officer of the town. A maternity home and a nursing home were also proposed adjacent to the hospital.¹¹⁸

Leisure

Khem Chand also proposed leisure activities like separate clubs for ladies and gentlemen, medicated baths (Russian, Turkish and Electric), public garden, theatre, cinema and swimming tank for his proposed town.¹¹⁹ These ideas originated from two streams. On one hand spaces like clubs and cinema depict the current trends and fashion prevalent in the European community in India during that time and hence popularly followed by the brown sahibs. On the other, public garden and swimming tank depict 'active body culture' which was also a very important aspect of modernist movement¹²⁰.

Electricity as a Wonder invention

Like Water Supply, it was proposed that the town would generate its own electricity.¹²¹ As a result, the electric power would be supplied to every house practically at the cost price. Its uses were not limited merely to lighting and fans but, being cheap, it was proposed to be used for various innovative purposes, i.e., cooking of food, heating the rooms, dusting of carpets and furniture, cleaning and polishing of boots. It was anticipated that the use of

¹¹⁶ Chand, D.K. (1922). *The Model Town*. Part I : 5.

¹¹⁷ Chand, D.K. (1922). *The Model Town*. Part I : 5.

¹¹⁸ Chand, D.K. (1922). *The Model Town*. Part I : 10.

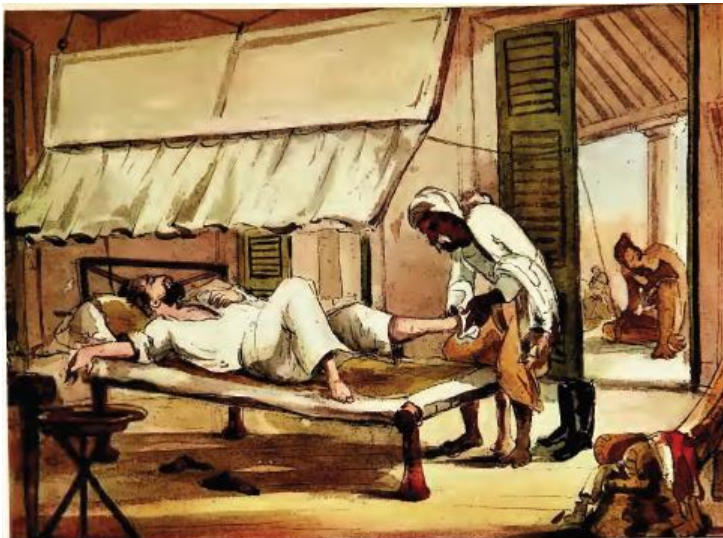
¹¹⁹ Chand, D.K. (1922). *The Model Town*. Part I : 10-11.

¹²⁰ Wilk, C. (2006). The Healthy Body Culture. *Modernism Designing a New World*. Wilk, C. (ed.). London: V & A Publications. pp. 249-296.

¹²¹ Chand, D.K. (1922). *The Model Town*. Part I. p. 4.

electricity would 'do away with dirt, dust, coal and smoke nuisance'.¹²² Electric Clocks were also proposed which would be controlled and regulated from a Central Office.¹²³

Whenever colonial technologies in India are discussed industrial modes of technology like methods of communication and transportation (telegraph, postal services, and railways) take priority over domestic technological usage that was gradually transforming the domestic lives of individuals, both British and the natives. By the time Khem Chand presented his scheme in 1919 these domestic technologies had certainly come a long way from what captain G.F. Atkinson has illustrated in his comic satire *Curry and Rice*, 3–4.



Drawn by: Capt. G.F.
Atkinson

Curry and Rice (1859) (No
Pagination)

3–4 Colonial Technological Development

The Punkah; a manually operated gadget designed to provide thermal comfort and drive away the mosquitoes. Constructed from a wooden frame with a cloth frill, it was operated by a punkhawala (fan puller) pulling a string to achieve a to-and-fro motion to produce air current.

Khem Chand's proposal depicts a very advanced form of use of electricity as it was expected to be low-cost owing to self-production by the Society. In the west, electrical cooking has been around since 1890's, and many European scientists, inventors and visionaries had been trying to incorporate it in

¹²² Ibid.

¹²³ Ibid.

residential settings to reduce the cost of fuel and domestic labour.¹²⁴ Most of them were focussed on three basic domestic tasks of lighting, cooking and heating despite an initial lukewarm response from critics. However, in 1913, Georgia Knap, a French inventor, designed *la maison électrique* (The Electric House) in Paris.¹²⁵ Items from this house were first shown in the Daily Mail Ideal Home Exhibition in Olympia (London) in October 1913. This house intended to take the use of electricity beyond the lighting, heating and cleaning. Therefore in addition it had electricity-operated boot-cleaning, ironing and floor-polishing in the kitchen. In the pantry there was a device for electrocuting flies. In bedrooms it provided window curtains which could be opened and closed by the pressure of a button. In bathroom hair could be dried and brushed and towels warmed by using electricity. It even showed babies being fanned to sleep. The most ingenious gadget was the electric waiter which was 'a dinner-table railway with brain'¹²⁶. It showed dinner being served by electricity without the presence of a servant in such a way that each dish was presented to each guest, and the course followed course with almost human precision.¹²⁷ From Khem Chand's descriptions, it is evident that he was aware of this development and was quite keen to have it implemented in his proposed town. Like all idealist endeavours, these were not without criticism even in the West. Nevertheless, many still agreed that much of the domestic labour then regarded as inevitable would be reduced by the adoption of modern appliances and methods thus providing more comfort to everybody concerned.¹²⁸ Hence,

¹²⁴ See R.A.F. (1893). Electrical Cooking. *Science*. Vol. 22. No. 554 (Sep. 15). pp. 146-148; Crompton, R. E. (1895) The Use of Electricity for Cooking and Heating. *The Journal of the Society of Arts*. Vol. 43. No. 2214 (APRIL 26). pp. 511-522; Lanchester, M. (1914). *Electric Cooking Heating, Cleaning etc.* London: Constable and Co.

¹²⁵ Magnien, M. (1980). *Du rêve à la rigueur: la maison électrique de Georgia Knapp* (From dream to rigor: the electric house by Georgia Knapp) (1913). Neuilly-sur-Seine, Paris: Centre de Recherche Sur la Culture Technique. pp. 1993-97.

¹²⁶ Unknown Author. (1913). Electric Waiter. *Daily Mail* [London]. Oct. 03. p. 5.

¹²⁷ Unknown Author. (1913). The Ideal Home Exhibition. *Journal of the Royal Society of the Arts*, Vol. 61, No. 3180 (Oct. 31). p. 1076.

¹²⁸ Unknown Author. (1913). The Ideal Home Exhibition. *Journal of the Royal Society of the Arts*, Vol. 61, No. 3180 (Oct. 31). p. 1077.

In that, rather than in any appeal to efficiency or economy, lies the hope of superseding old-fashioned, unnecessary methods in the home whether it be cooking, heating, lighting, or cleaning. For when all is said, comfort is the keynote of the British home, and it is well that the public should realise how recent inventions and improvements make that ideal more possible.¹²⁹

One of the major advantages of adoption of technology as proposed by Khem Chand was eliminating the use of servants. Hence he wrote:

The servant problem, which is daily becoming more and more embarrassing, will be solved, to a great extent in this town. Sewerage will do away with individual engagement of sweepers. With water laid on, and electric power to do most of the work now done by servants, the telephone to do the messenger's work, and the sores etc., to supply all the requirements at the very doors of the inhabitants, there will be no necessity of keeping many servants¹³⁰.

Even the communal services like the laundry were proposed on similar lines where technological advancement could result in increasing the life of clothes and saving time.

There will be an up-to-date laundry, where the clothes would be washed in a scientific manner. They would not be torn or damaged as is now done at the hands of dhobis. The lives of the clothes having been lengthened the cost of clothing would be lessened. The clothes would be washed quickly and delivered promptly.

Concrete as a Wonder Material

For the purpose of house design, Khem Chand advocated modern construction by suggesting:

Houses if possible, will be built of reinforced concrete.¹³¹

Since its invention, concrete has been regarded as a wonder material as '*of all materials of construction it is the one that adapts itself most easily to all our*

¹²⁹ Ibid.

¹³⁰ Chand, D.K. (1922). *The Model Town. Part I.* p. 6.

¹³¹ Chand, D.K. (1922). *The Model Town. Part I.* p. 3.

*conceptions*¹³². It was the primary reason that many architects and designers working on designs which involved complicated geometry have preferred it over other materials. While in the US concrete was being used to construct dwellings since 1860's, and in the UK since 1900's, in the Indian subcontinent its use especially with reference to construction of residential buildings has been very limited, even today. However this does not suggest that the idea was non-existent in India at that time. There was one unique example in 1910 where 'a very pretty dwelling house' at Tanjore was constructed for the South Indian Railway Company in which RCC was largely used¹³³. The more popular form of construction, however, was reinforced brick construction as it had been the traditional method, and was always favoured because of being low-cost and efficient¹³⁴. That is why it wasn't until 1928 that Punjab PWD issued specifications for constructing reinforced concrete battens¹³⁵.

Telecommunication

Khem Chand's techno-scientific modern town would be incomplete without the telecommunication facilities. Hence it was proposed that

Each house could be fitted with a telephone. The telephone will do all the messengering; and by its aid most of the shopping could be done while sitting at home. A message by telephone would bring anything required to the door, within a few minutes, from the General Stores.¹³⁶

Shopping Facilities

Similarly, he proposed a modern version of shopping where he abandoned the idea of individual small shops in favour of a large co-operative departmental store.

No individual shops will be allowed in this town. There will be only one shop which will stock and sell all articles that are required by the people living there.

¹³² Brunhes, J. (1920). *Human Geography*. p. 184.

¹³³ Bond, J.W. (1914). *Southern India: Its History, People, Commerce and Industrial Resources*. p. 672.

¹³⁴ Ram, G. (1927). *Pocketbook of Civil Engineering*. 5th ed. Lahore: The Civil and Military Gazette press. p. 345.

¹³⁵ Punjab Public Works Department (1928). *Paper No. 78 Instructions for Making Reinforced Concrete Battens*.

¹³⁶ Chand, D.K. (1922). *The Model Town*. Part I. p. 4.

This shop will not belong to any one man or to a group of men, but will belong to the town; that is, to every one living here. As profit making will not be the aim of this shop, all things would be supplied at practically cost price. The inhabitants of the town would thus save money that goes to the pockets of the retail shop-keepers, and other middle men as a profit.¹³⁷

Education

Khem Chand's ideas were not limited to improving the physical characteristics of the town. Therefore he also proposed a comprehensive education policy to be adopted in the Town. This education policy could be seen in three distinct levels. Infant education, boys' education and girls' education.

Early Education

Khem Chand's ideas definitely revolve around the British nursery school system which was aimed at providing all children equal opportunities from the very start of their lives. According to him:

My idea is that up to the age of one year the child should remain with the mother, and thereafter, up to the age of 6, he should be taken every morning to the nursery and from there brought back in the evening. In the nursery all the children will be looked after by the trained nurses. The children would, there, be fed on the food that is suitable for children of their age and would be given toys to play with. Thus the children will be brought up in a much healthier and better way than they would be in ordinary homes, and mothers will be relieved of a great deal of worry and anxiety.

One of the major aims of this nursery was to relieve burden from single fathers as Khem Chand had said:

There are some unfortunate infants whose mothers die when they are only a few days or a few months old. Their fathers would be relieved, to a great extent, by the institution which would mother the infants during their infancy.

The concept of nursery schools had evolved in early nineteenth century when Robert Owen set up first nursery-infant school in New Lanark Scotland. Later

¹³⁷ Chand, D.K. (1922). *The Model Town*. Part I. p. 4-5.

the American born McMillan sisters (Rachel and Margaret¹³⁸) who relocated to Britain in 1865 continued this tradition by opening new nursery schools. Their biggest achievement was to start an Open-Air Nursery School & Training Centre, *The Nurture School*, in Deptford in South East London in 1914. Within a few weeks of its inception, it had an enrolment of thirty children ranging in age from eighteen months to seven years. Their practices were very modern and scientific.¹³⁹ The nursery school comprised of a shed which was closed on three sides¹⁴⁰ with an access to a flower garden¹⁴¹. But the concept of nursery schools was not very widespread in even in Britain in those days as there were just 24 nursery schools by 1923. In case of the Indian subcontinent, there was no concept of nursery schools at that time. In many European and well-to-do Indian families, nurses were kept to look after the children when they were young. But in most of the ordinary Indian families it was not possible to keep nurses due to the associated expenditure. Hence the mothers had to look after their children besides attending to their other household responsibilities. Hence in Khem Chand's (perhaps somewhat exaggerated) view:

I pity the poor mother who has to look after 3 or 4 small children, has to cook the food, and to do other household works. For her to do all these things properly and in a satisfactory manner, is an impossibility. The result is that the children are left to themselves. They play about in the streets and in the gutters, they learn dirty habits, they inhale and eat lot of dust and get ill, they get hurt by passing vehicles, are badly injured and may at times get killed. The high infant mortality in this country is due, mainly, to the neglect of the children in their early years. Besides, it is not every mother who can bring up

¹³⁸ Margaret McMillan turned into a politician and wrote several books and pamphlets on the subject including *Child Labour and the Half Time System* (1896) and *Early Childhood* (1900). In 1904 she published her most important book, *Education Through the Imagination* (1904) and followed this with *The Economic Aspects of Child Labour and Education* (1905).

¹³⁹ Rachel, who was mainly responsible for the kindergarten, proudly pointed out that in the first six months there was only one case of illness and, because of precautions that she took, this case of measles did not spread to the other children.

¹⁴⁰ Great Britain, Ministry of Education. (1919). *The Health of the School Child*. London: HMSO. p. 15.

¹⁴¹ Ibid.

her child in a satisfactory manner, even though she has time and leisure at her disposal. To do so requires a well trained and experienced hand.¹⁴²

Khem Chand's ideas also have some inspiration from the Acland Report 1908 which provided guidelines for school education for under-5's especially explaining the moral, physical and mental benefits¹⁴³ for nursery education for young infants whose 'homes conditions were imperfect'¹⁴⁴.

Boys' Education

The anxiety of a modern Indian can be clearly understood in the different forms of education that Khem Chand proposed for boys and girls.

For boys he proposed '*an up-to-date and well equipped school*' where the aim of education was to '*train and sharpen their intellect and common sense, and turn them out into good practical men*'¹⁴⁵. He proposed that:

My idea is that the boys should not be taught by classes but by subjects. The year should be divided in to 3 or 4 terms and examinations should be held at the end of each term, and the boys should be promoted to the next grade in those subjects in which they show that they know well what was taught to them during the preceding term. This way the boys will make much rapid progress in those subjects, in which they take interest, and for which they have natural aptitude. Every man can be successful provided he is put in the right place; and this method will show to the parents what their boys' tendencies are. This subject is a vast one and will be dealt later separately.¹⁴⁶

Khem Chand's ideas surprisingly resemble to those of John Dewey, especially with reference to his concept of experience and education¹⁴⁷.

¹⁴² Chand, D.K. (1922). *The Model Town*. Part I. p. 7.

¹⁴³ Great Britain, Board of Education (1908). *The Acland Report, Consultative Committee Report Upon the School Attendance of Children Below the Age of Five*. London: HM Stationery Office. p. 24.

¹⁴⁴ Great Britain, Board of Education (1908). *The Acland Report*. p.19.

¹⁴⁵ Chand, D.K. (1922). *The Model Town*. Part I. p. 9.

¹⁴⁶ Ibid.

¹⁴⁷ Dewey, J. (1916). *Democracy in Education*. New York: Macmillan.

Girls' Education

For girls' education he adopted an entirely different approach as he did not approve of the education provided to them in schools which was *not the kind of education that fit them to be good house-wives*¹⁴⁸.

His main objection was that the girls were taught mainly on the lines that the boys were taught at school. In this process they learnt some sewing and cooking as well but, the school girls though they could make some fancy lace and *kasida* [embroidery] work, were unable to make an ordinary *kurta* [tunic] or *pyjama*; and while they could make some nice sweets, they could not ordinarily cook good *dal* [lentils] and *chapaties* [Indian flat bread].¹⁴⁹ Hence in his opinion, this kind of education was of little use to them when they got married and had to set up a house of their own¹⁵⁰. Accordingly, he proposed:

My scheme is, that education to girls should be given entirely in vernacular, and English be taught during the last two or three years of the course. The girls should be taught reading and writing, arithmetic, keeping of accounts, domestic economy, house decoration, drawing, sewing and knitting, cooking and diabetics, gardening, bringing up of children, nursing, music and fine arts.

I would make it obligatory on the bigger girls to attend the nursery daily, for two to three hours. There they will be required to look after the babies, to bathe them, to clothe them, to cook food for them, to feed them, to play with them and to take interest in them. By such training the girls, when they get married and have to rear up their children, will not experience any difficulty.¹⁵¹

Though considered quite chauvinistic, these ideas were not non-existent in other parts of the world. His approach to girls' education exhibited a strong influence from the Mothers' Schools that originated from Stuttgart Germany as a consequence of First World War to train future brides of Nazi soldiers.¹⁵²

¹⁴⁸ Chand, D.K. (1922). *The Model Town*. Part I. p. 8.

¹⁴⁹ Ibid.

¹⁵⁰ Ibid.

¹⁵¹ Ibid.

¹⁵² Stephenson, J. (2001). *Women in Nazi Germany*. Harlow: Longman.

In these schools girls were only taught house managing skills with a strong condemnation for modern education¹⁵³.

Role of religion in a 'Modern' Indian Town

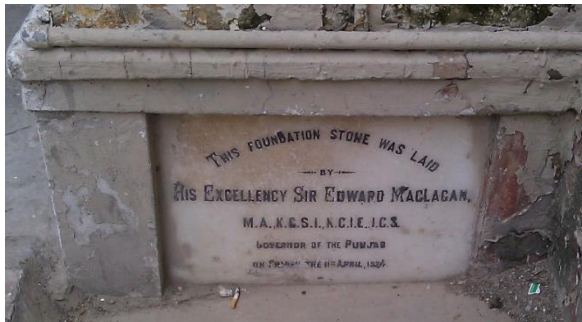
In a social setting which was founded on the prime principle of cultural and traditional distinctions, the process of modernization was accompanied with numerous anxieties. In order to cater for these anxieties Khem Chand also proposed many ideas so that the basic structure of the society could flourish in line with the modern thoughts. Khem Chand's ideas did not elaborate on any religion-associated characteristics of the town. Hence there is no mention of any religious activities or specialized religious spaces. However his proposal of farms elaborated on a vegetarian diet and notable exclusion are the slaughter house facilities and a poultry farm implying that it was intended primarily for a Hindu population. (Discussed later in detail in Chapter 5).

Conclusions

Khem Chands ideas were interesting and in many cases novel but not non-existent in India and other parts of the world. However it was only when they were implemented collectively that the sum of these individual ideas was certainly greater than the individual ideas themselves. In this scheme we not only see an emergent new social class but also the process by which the people belonging to that class were adapting to the changing world around them and catering to their anxieties resulting due to encounter with the culture of their colonial rulers. They were willing to modernize but not abandon their culture. Rather what they were developing was techno-scientific modernism which allowed them to remain intact with their culture and allowed progress and growth simultaneously. This was perhaps the prime reason that like-minded people welcomed this plan and the Model Town was developed.

¹⁵³ Ibid.

From Idea to Inception



Photograph by: Shama Anbrine

2011.

4–1 The Foundation Stone of the First Building

(Right) The original foundation stone, which is located in a non-prominent corner of the building and is in a deteriorated condition.

(Left) The replicated foundation stone located at the entrance of the Model Town Society Office Building.

CONTENTS	Public and Government Support
	Site Selection and Acquisition
	The Design Competition
	The Inauguration
	Construction of the Town
	Financial Crisis
	Conclusions

After publishing his 'Scheme' in 1919 and incorporating revisions and suggestions to it in 1920, Khem Chand spent the next five years in an intense struggle to realise his dream. This chapter looks into the struggle that was involved in the process. It elaborates on Khem Chand's course of action to acquire support for his proposed scheme from the general public and the Government, site selection and acquisition process and the design competition for master plan of the town. It further discusses the inauguration of the town early construction activities in the town, and its pre-1947 financial crisis.

Public and Government Support

To realize his idea of an Ideal Co-operative Garden Town, Khem Chand first sought out for the public support.¹ In his scheme, he had clearly indicated that he did not want a single *piee*² from anyone, but only wanted encouragement, good wishes for the success and suggestions for improvement from his friends and acquaintances. However he encouraged them to spread the word amongst their social circle and inform him if anyone else was interested in purchasing a house and residing in this new town.³ Thus in his first pamphlet, people were simply requested to sign a declaration of support so that he could demonstrate it as an evidence to concerned authorities.

His plan was that as soon as he had attained support of buyers of 200 houses, who were also to be the members of the Society, he would send them the plans, the estimates and the proposed bye-laws, and would then convene a meeting of those gentlemen in Lahore. They would be shown different sites and would be asked to pass the bye-laws and rules. Only when all of this had been accomplished, would they be required to pay their share money not exceeding Rs. 100 per share. Later, the cost of a house would be paid according to the estimated values in four equal instalments as follows:

¹ Chand, D.K. (1922). *The Model Town. Part I.* p.1

² A penny equivalent of Indian currency at that time.

³ Chand, D.K. (1922). *The Model Town. Part I.* p. 12.

To

DIWAN KHEM CHAND.

BARRISTER-AT-LAW,

Lahore.

DEAR SIR,

I heartily approve of your scheme about having within easy reach of Lahore an "Ideal Self-contained Town" in which each house will have a garden and will be built like a Bungalow, and the value of houses will vary from Rs. 4,000 to Rs. 12,000 per house.

I would like to buy a house in that town, but when your scheme takes a practical shape and you have secured buyers of at least 200 houses, only then will I pay my share money, not exceeding Rs. 100, and $\frac{1}{4}$ th of the value of the house as first instalment. The amount shown below is the approximate value of the house that I would like to buy.

Value of House Rs... ..

Yours faithfully,

Dated.....192 .

Address

.....

Chand. D.K. (1922). *The Model Town*. Part I. p. 14.

c. 1919.

4-2 Prototype declaration for supporting the establishment of a new town near Lahore

- (1) After registration of the company.
- (2) After purchase of the land.
- (3) After purchase of materials for construction
- (4) After construction of the house.

Those members who were unable to pay any instalment after the first would be given advance money by a Co-operative Bank in the town at a reasonable interest on the security of their houses. According to him the first houses were proposed to be ready by the end of third year and time frame for completion of the whole town was five years. He also provided a draft letter at the end of his circular so that all prospective members could sign and return it to him, and thus he had a proof of popularity of his scheme to be shown to the Government, **4-2**.

When Khem Chand initially published his scheme, he was quite sceptical that people may not support him as he thought his ideas to be 'very much in advance of times', quite rightly as there was no such scheme existing in India at that time (discussed in previous Chapter). But to his surprise, his scheme was 'eagerly welcomed' by the educated class, a major reason of this support might have been that initially he wanted their moral support and approval in writing rather than any money. By September 1920, he had been able to get assurance of some 200 prospective members out of which 26 were Engineers which encouraged his morale, as they were not only willing to buy a house in his town but had also promised to provide technical help and assistance when required⁴.

After getting enough public support, Khem Chand showed his plans to Hubert Calvert, Registrar of the Co-operative Societies and Joint Companies in Punjab. He not only showed keen interest and suggested developing the Society on Co-operative Model, but also sent the approved scheme to the Government, and was able to get 'sympathetic support' of Lt. Governor of Punjab, Edward Maclagan (later Sir) ⁵ who himself was one of the pioneers of

⁴ Chand, D.K. (1922). *The Model Town. Part I*. p. 15.

⁵ Chand, D.K. (1922). *The Model Town. Part I*. p. 16.

Co-operative Societies in the Punjab in the early 1900's (discussed earlier in Chapter 1).

One of the less appreciated features of urban development under the colonial administration was construction of towns and areas that, "could be viewed as an opportunity to experiment with forms of social organization which were less achievable at home"⁶. Ultimately this has given rise to the best practice of town planning in the colonies by the colonial rulers⁷. Khem Chand was thus encouraged to pursue his scheme and Maclagan's active interest in the scheme led to the appointment of a committee to consider its feasibility and oversee its working. The first meeting of the committee took place on 16th November, 1920 and its members included, Sir H. J. Maynard, Financial Commissioner Punjab as Chairman; H. Calvert; B. T. Gibson, Financial Secretary to Government of Punjab; R.B. Ganga Ram; R.B. Amar Nath Nanda, Sanitary Engineer to Punjab Government; F.F. Francis, Consulting Architect to Punjab Government⁸ and Diwan Khem Chand.⁹

He proudly claimed that he did not use any formal means of advertising to attract the prospective members¹⁰. It in itself is pretty amazing that this scheme became well known among the bourgeois just by word of mouth and a few pamphlets. By January 1921, he had enough members to request for a share

⁶ Home has identified three ideologies of British overseas expansion which have influenced the way colonial urban forms have emerged. Sometimes co-existing and at other times competing, these include (i) the ideology of state control, where colonies were developed as a state initiative, and colonial governors and ruling elite used physical forms of towns and the architectural styles of prominent buildings to express their political authority (ii) capitalist ideology, where the aim was to maximize wealth from trade, extraction and production. This was undertaken by keeping public expenditure to a minimum by reducing municipal planning and administration. (iii) utopian colonial settlement, where the settlement could be viewed as an opportunity to experiment with forms of social organization which were less achievable at home. See Home, R. (1996). *Of Planting and Planning*. pp. 3-4.

⁷ Ibid.

⁸ There is a fair chance that the first and middle name initials in this name are incorrect as no such name exists in RIBA kalender. Consulting Architect to the Government of Punjab at that time was Basil Martin Sullivan, and in a Government report it is stated that Mr. Francis was teaching at architectural draftsmen classes when Mr. Sullivan was on leave. This clarifies that his tenure was very short in Punjab and thus not mentioned in his biography. No first names or initials were used in any Government document to clarify the ambiguity. See Education Department Punjab. (1920). *Report on the Progress of Education in the Punjab*. Lahore: Government Printing. p. 49.

⁹ Chand, D.K. (1922). *The Model Town*. Part I. p. 23.

¹⁰ Chand, D.K. (1922). *The Model Town*. Part I. p. ii.

money of Rs. 100¹¹. (As detailed in the specimen letter below). He also encouraged people to book their houses in advance so that

An attempt could be made to accommodate all the friends and relations among the Members near each other and the requirements of the Town could be better determined.¹²

This in turn would be of great assistance in developing the lay-out plan of the Town. A preliminary general meeting of two hundred members of the proposed co-operative society was held in the Lahore Town Hall in February 1921¹³. Presided by Sir Ganga Ram, it appointed a preliminary committee under Sir Ganga Ram that worked out preliminary details and bye laws and requested Khem Chand to accept the office of Secretary of the Society¹⁴. In November 1921 first annual general meeting of the members was held in the Lahore Town Hall.¹⁵ In this meeting a 21 member preliminary committee was formed which was assigned the task of formation of the bye-laws and other preliminary work for the formation of the Society¹⁶.

Site Selection and Acquisition

The location of the site was crucial for the success of the proposed town and hence it troubled Khem Chand's mind for quite some time¹⁷. Ideally the site location was proposed to be in the proximity of Lahore so that the people especially the ones going to city on daily basis could easily travel, yet maintaining a distance from the city to eliminate the congestion and thus indulge into the peace and serenity of the suburbs. Accordingly Khem Chand proposed it to be at a distance of six or seven miles from the city¹⁸.

¹¹ Chand, D.K. (1922). *The Model Town*. Part I. p. 14.

¹² Chand, D.K. (1922). *The Model Town*. Part I. p. 21-2.

¹³ Chand, D.K. (1922). *The Model Town*. Part I. p. ii.

¹⁴ Chand, D.K. (1922). *The Model Town*. Part I. p. 34

¹⁵ Chand, D.K. (1922). *The Model Town*. Part I. p. 40.

¹⁶ Chand, D.K. (1922). *The Model Town*. Part I. p. 40-8.

¹⁷ Chand, D.K. (1922). *The Model Town*. Part I. p.16.

¹⁸ Ibid.

To

DIWAN KHEM CHAND.

BARRISTER-AT-LAW,

Lahore.

DEAR SIR,

I have to-day sent Rs. 100 by Cheque
Money Order, to
the Central Co-operative Bank, Limited, Lahore, towards
the purchase of one share in the Society which is to be
formed for the establishment of a Co-operative Garden
Town in the suburbs of Lahore on the lines proposed
by you. I have noted the date and the place of the
General Meeting and I will try to attend it, but if I am
unable to do so, then you may please place before the
General Meeting, on my behalf, the suggestions that
I am sending you on a separate piece of paper. I,
however, agree to abide by all the resolutions that are
passed by the members present at that meeting.

In case the above Society is not registered then
you will please return me my Deposit.

Yours faithfully,

Dated.....192 .

Address

.....

Chand. D.K. (1922). *The Model Town*. Part I. p. 14.

c. 1920.

**4-3 Deposit declaration for supporting the establishment of a new town
near Lahore**

For the purpose of site selection, he organized a general meeting in Lahore under the chairmanship of Rai Bahadur (later Sir) Ganga Ram during the Easter vacations of 1920, The event was attended by a 'good number' of Engineers and Executive Engineers from throughout Punjab, as most of them were already in the city at that time to attend the Punjab Engineers' Conference. In that meeting various sites around Lahore were considered.¹⁹

Khem Chand does not describe the process of site selection in his report dated 1922. However with reference to his report dated 1931 both Vandal²⁰ and Sheikh²¹ argue that Khem Chand's first choice was to set up his ideal town in Shahdara, a suburban satellite town in West of Lahore. This might have been due to the fact that Shahdara, literally meaning the Gateway of the Royals, was an elite suburban area during the Mughal period and three important Mughal Gardens, Bagh-e-Mirza Kamran, Tomb Gardens of Mughal Emperor Jehangir and his wife Noor Jehan were in the vicinity. Separated from the city of Lahore by the River Ravi, a natural border, yet adjacent to the Grand Trunk Road, it would have been not too distant nor too near to the city. However the site had its inherent problems, the chief problem being its vicinity to the River Ravi thus susceptibility to regular flooding.

Vandal claims that Khem Chand had started negotiations for the purchase of land spanning 1,000 acres along the Grand Trunk Road from Seth Sakhi Shah, the owner. However, it was Rai Bahadur W.C. Chopra, Executive Engineer of Gujranwala Division, who dissuaded him due to this flooding aspect and further suggested that he should look at Rakh Kot Lakhpat instead. Sheikh narrates a slightly different incident where he claimed that it was Sir Ganga Ram who immediately rejected the idea of having this ideal town on the other side of the River Ravi near Shahdara, saying that Khem Chand's ideals would be swept away by flood every third year. On seeing him so dejected, he got up and took Khem Chand in his car to see the "Rakh Kot Lakhpat Reserved Forest". Regardless of the person influencing this decision, the conclusion is

¹⁹ Ibid.

²⁰ Vandal P. and Vandal S. (2006). *The Raj, Lahore and Bhai Ram Singh*. pp.83-84

²¹ Sheikh, M. (2012). *The Model Town that Lost its Ideals*. Dawn [Lahore]. 31 Oct. [accessed 22 July 2012] <http://archives.dawn.com/2004/10/31/fea.htm>

same in both these incidents as both agree on the fact that Khem Chand went to see the proposed site accompanied by Sir Ganga Ram and '*literally fell in love*' with it. Incidentally, it was the same site that Patrick Geddes had elaborated upon in his report with reference to a visit where he was shown a site for a future garden city in Lahore²². However the discrepancy in time (Geddes visit was in 1917 and the idea of a Model Town was not initiated until end of 1919) gives way for a possibility that there might have been an earlier plan of a garden city on this site which was never materialised. There is no further evidence to substantiate this claim.

Rakh Kot Lakhpat was a rich forest plantation²³ in southeast of Lahore adjacent to the Ferozepore Road, segment of the Grand Trunk Road leading to Ferozepore which ran along it for a distance of two miles²⁴, with a small distributary of the Canal²⁵ passing by it. It was at an accessible distance from Lahore, located at a distance of 1½ mile from nearest railway station, 5½ miles from the Lahore District Courts and 3 miles from the Lahore Municipal Boundary²⁶. According to Government sanitary reports, the locality was the healthiest in the Punjab²⁷. This was concluded from the Sanitary report of 1919/1920, according to which the town of Icchra which was located at a distance of two miles from the Rakh on the Lahore side with a population of over 5,000 persons was the healthiest town in the province despite its old and insanitary houses and subsequently had a death rate of only 14.79 per *mille* as compared to Lahore's death rate of 34.05²⁸. The sub-soil below 6 or 7 feet, was *Kankar*, a nodular form of impure lime which was found in every river valley and used in the Indian Peninsula for metalling roads²⁹. Kankar was viewed an ideal sub-stratum from health point of view as its dual

²² Explained earlier on p. 15.

²³ Chand, D.K. (1922). *The Model Town*. Part I. p. ii.

²⁴ Chand, D.K. (1922). *The Model Town*. Part I. p. i.

²⁵ Whenever Canal is used with reference to Lahore, it refers to Lower Bari Doab Canal.

²⁶ Chand, D.K. (1922). *The Model Town*. Part I. p. i.

²⁷ Chand, D.K. (1922). *The Model Town*. Part I. p.46. See also By Own Correspondent. (1922). Lahore House Shortage. *The Times of India* [Bombay]. 19 May. p. 7.

²⁸ Chand, D.K. (1922). *The Model Town*. Part I. p. 46

²⁹ Hunter, Sir W.W. (1886). *The Indian Empire: Its People, History, and Products*. p. 627

characteristics of being hard and porous with the presence of calcium carbonate as a major element in its composition has the effect of elimination of damp vapour³⁰ and consequently, as it was believed at that time, elimination of rats³¹. The water on site was suitable for drinking purposes and the soil was fertile³² which could, later, be quite significant in developing the fruit gardens and farms. The trees offered a distinct advantage, as they would provide shade from the very beginning, and the Town would not look barren and dreary³³ as 'unhappily most of the new Colony town do'³⁴. Later it was decided that the trees that come in the compounds of houses and along the roadside would not be cut down³⁵.

In short, the land was consolidated and healthy land with access to good drinking water and easy access from the city. Thus, it was decided to 'request' the government for 1000 acres of this land for the purpose of the garden suburbs³⁶. The simple act of requesting holds a very wide and dubious meaning in this context. By requesting, Khem Chand may have implied to the prospective members that the Government on its discretion might be able to provide the land at negligible or no cost at all to the scheme thus ensuring the low cost of houses he had initially visualized. However, before acquisition of the land, he had to move through a number of official red-tape channels in order to satisfy the Governmental procedures and requirements of individual departments especially the Forest Department which owned the land.

³⁰ "Lahore's Model Suburbs, Settlement of Land acquisition, solid progress." *Civil and Military Gazette* [Lahore, Punjab] 19 May 1922: 14

³¹ (1910). *Report on Plague Investigations in India*. p. 136.

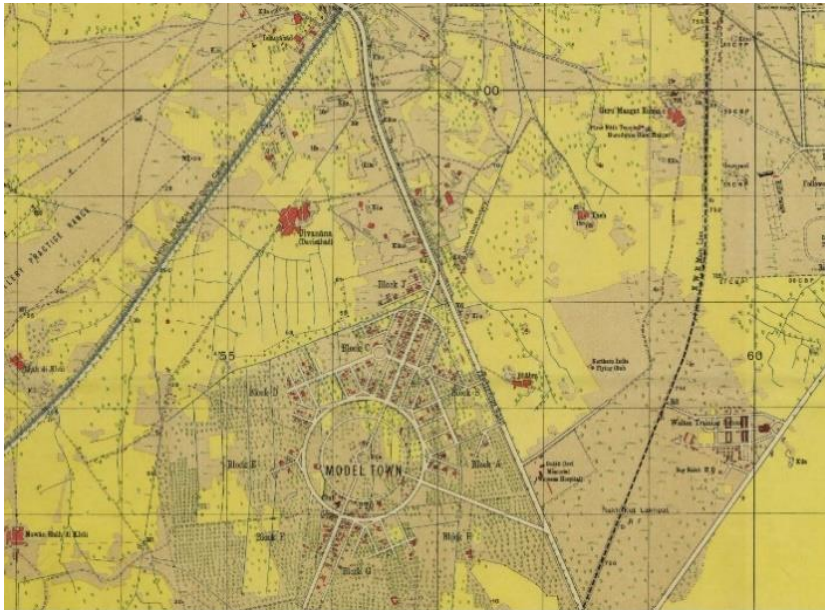
³² (1910). *Report on Plague Investigations in India*. p.16.

³³ In all British developed areas of Lahore like Cantonment and Civil Station trees were planted after the area had been developed.

³⁴ Chand, D.K. (1922). *The Model Town*. Part I. p. ii.

³⁵ Ibid.

³⁶ Chand, D.K. (1922). *The Model Town*. Part I. p. 35.



Guide Map of Lahore 4th rev. ed.

IOR Map Collection

1935

4-4 Site for the Model Town



Photographer: Diwan Khem Chand

c.1920

4-5 A View of the Site before Acquisition

The Government managing committee introduced a major alteration by changing the scale of the town from 1000 houses to 500 houses and thus considered 500 acres to be sufficient for a Town of this size. It was expected that beside the 'usual grants' the Government would meet half the cost of the Water-works and Sewerage where the 'usual grants' probably refer to Government help in kind like subsidized rate of land rather than in monetary terms. Thus the required site was reduced and the next step was acquisition of land from the forest department³⁷.

The Forest Department, however, was not very pleased with this selection. Rakh was a valuable forest plantation of nearly 3000 acres³⁸. It was one of the three major forest plantations in Lahore (the other being Changa Manga (10000 acres) and Tera (800 acres) which were initially planted along upper Bari Doab canal) to provide fuel for the railways. This forest mainly consisted of precious Shisham and Mulberry trees³⁹ hence the Forest department regarded it as one of the most promising plantations near a city as important as Lahore⁴⁰. Consequently, the officials were not happy parting with this asset, let alone settle it at a subsidized rate. Even after intervention by the Governor himself, it wasn't until 18th February 1921 that the Forest department was

³⁷ Chand, D.K. (1922). *The Model Town*. Part I. p. 37.

³⁸ Two similar articles written around the same time by Assistant Conservator of Forests Punjab R. Maclagan Gorrie give an insight into this process. See Gorrie, R. M. (1924). The Irrigated Plantations of Punjab. *Empire Forestry Journal*. Vol. 3. No. 1. p. 244. and Gorrie, R. M. (1924). Recent developments in the Punjab Irrigated Plantations. *The Indian Forester*. Vol. 50-12. p. 622.

³⁹ At that time Shisham timber, a heavy, fairly smooth grained wood, was mainly used for building joists and beams, panelling and furniture, carriage and wagon work, including motor lorry bodies. Mulberry, a light springy wood, had gained importance in the late nineteenth and early twentieth centuries due to the establishment of a new business in the Sialkot, that is, manufacture of sports goods. The outer white wood from the 'green' mulberry logs was much prized for certain parts of tennis racquets, and the remainder was used for hockey sticks and many small articles. Dry logs were also in high demand for manufacture of tool handles used for construction purposes. Thus mulberry which was once considered worthless, was fetching more than Shisham timber, their respective rates being Rs. 3/3/6 and 1/14/5 per cubic foot in 1924. Both the woods also fetched high as firewood (average price @Rs. 7/8/8 per 100 cubic feet stacked). See Gorrie, R. M. (1924). The Irrigated Plantations of Punjab. *Empire Forestry Journal*. Vol. 3. No. 1. p. 244.

⁴⁰ Gorrie, R. M. (1924). The Irrigated Plantations of Punjab. *Empire Forestry Journal*. Vol. 3. No. 1. p. 244.

finally willing to sell 500 acres to the Society⁴¹. Afterwards, contrary to expectations of the Committee, the Society was able to get 620 applications for houses by June 1921⁴². Hence more land was needed and thus Khem Chand requested 1000 acres of land from the Financial Commissioner.⁴³ To expedite the process he went to Simla, the summer capital of India, as desired by the Managing committee and discussed the matter in detail with all the high Officers of Government who were likely to deal with this matter⁴⁴. He was quite encouraged by them all, as they not merely exhibited great interest but also seemed concerned to accelerate the process of land transfer while the Governor and members of the Council expressed their best wishes for the scheme⁴⁵. Khem Chand thought that the Society would start its operation before the end of summer 1921⁴⁶. On the contrary, this was not the case as he himself later wrote:

But in my ignorance of official methods of doing things I did not quite realize that Government and its high Officers, however sympathetic, could not move in the matter until they had consulted the *Tahsildar*⁴⁷ and the *Patwari*^{48, 49}.

In July 1921, Mr. King, Development Commissioner went with Raja Narendra Nath and Khem Chand, to see the site at Rakh Kot Lakhpat⁵⁰. He wanted to know the prairie value of the land which could be provided by the Patwari only.

⁴¹ Chand, D.K. (1922). *The Model Town*. Part I. p. 37.

⁴² Chand, D.K. (1922). *The Model Town*. Part I. pp. 33-34

⁴³ Chand, D.K. (1922). *The Model Town*. Part I. p. 44

⁴⁴ Though no actual date of this visit is given, it can be safely assumed to be late June or early July, 1921, as Simla was a hill resort and the Summer capital of British India (1864-1947) see Kaminsky, A.P and Long, R.D. (2011). *India Today: An Encyclopaedia of Life in the Republic*. Volume 1. p. 306.

⁴⁵ Chand, D.K. (1922). *The Model Town*. Part I. p.45

⁴⁶ Chand, D.K. (1922). *The Model Town*. Part I. p.45

⁴⁷ Tahsildar or Tehsildar is a native (Indian) collector of revenue; a stipendiary officer of the Government, employed in the collection of the revenue, under subordination of a Magistrate who is the collector. See Martin, R.M. (1843). *History of the Colonies of the British Empire*. p. 319.

⁴⁸ Patwari is an Accountant. His major task is to keep the records, which contain an account of all the land and their current occupants. He also keeps the private accounts of the villagers and acts in general as a notary. See Keightley, T. (1847). *A History of India: From the Earliest Times to the Present Day*. p. 28.

⁴⁹ Chand, D.K. (1922). *The Model Town*. Part I. p.45.

⁵⁰ Ibid.

But as he was several places removed from the Financial Commissioner, and the papers had to go to him and return step by step through proper channel, it took nearly five months. Khem Chand sent a few reminders and subsequently the papers were returned to the Financial Commissioner around 12 November 1921⁵¹. The Tahsildar who did not understand that prairie meant *banjar*⁵² had valued the land arbitrarily at Rs. 1000 per acre after keeping the papers for nearly three months. Khem Chand argued that the price of similar land in its neighbourhood, both cultivated and uncultivated was about Rs. 224 per acre, so the cost of banjar land alone could not be more than its half.⁵³ In Early November 1921 Khem Chand had an interview with the Governor who seemed to be under the impression that the society was responsible for the delay in starting the work. He expressed a desire to see the site and on 15th November 1921 Governor Lt. Gen. Edward Maclagan accompanied by the new Development Commissioner E. R. Abbot and Diwan Khem Chand went to see the spot and agreed to give the land of the forest required by the Society⁵⁴ i.e. 1000 acres⁵⁵. Even then, on 16th November 1921, the Financial Commissioner sent a letter to Diwan Khem Chand, asking him to send the plan showing exactly the land required by the Society keeping in view both options, i.e., if 500 acre is provided or 1000 acres land is provided. The Land Acquisition Officer, however, reduced the cost of land to Rs. 350 per acre with an additional amount equal to the cultivated value of the forest payable if land from forest plantation were required⁵⁶.

In spite of all the official approval, the Forest department was reluctant to part with the land and raised many hindrances. In the end, the issue was referred to the Forest Committee of the Legislative Council, which finally decided that the area should be deforested and sold to the Society for the purpose of the

⁵¹ This was reported in First Annual General Body Meeting held on 27 November 1921 as "... the papers at last returned to the Financial commissioner a fortnight back." See Chand, D.K. (1922). *The Model Town*. Part I. p.45.

⁵² Banjar (from Hindi) meaning barren as in land.

⁵³ Chand, D.K. (1922). *The Model Town*. Part I. p. 46.

⁵⁴ Ibid.

⁵⁵ Chand, D.K. (1922). *The Model Town*. Part I. p. 38.

⁵⁶ Chand, D.K. (1922). *The Model Town*. Part I. p. 37.

Model Town⁵⁷. Though the scheme required only 1000 acres, it was compelled to buy the entire forest portion of 1963 acres, at a rate of Rs. 400 per acre, with an additional payment for the standing trees at Rs. 1, 54,500, bringing the total cost of land to a grand total of Rs. 939, 700.

Interestingly this final settlement of land has been described by the three major project players, Khem Chand, The Government and the Forest department, in contradiction to each other. While Khem Chand duly complained that the Society had to buy the land at more than its market value, the Government publication like *The Report of the Royal Commission on Labour in India* (1931)⁵⁸ describe it as a 'free lease' of land. The Forest Department was the most adamant regarding this transaction as a 'meagre' compensation for the value of standing crops of 5 years of age and over⁵⁹ and accordingly considered it quite 'unfortunate' that the Rakh had been 'surrendered' to the public for use as a model town site at a time when it had reached maturity to the point of yielding crops of commercial timber size⁶⁰.

A further vivid picture of this transaction can be understood in the light of the speech of Lt. Governor of Punjab (later Sir) Edward Maclagan at the inauguration ceremony of the first building of the town who said:

In my opinion, the main value of the scheme would have disappeared, if it had been dependent in any way on pecuniary concessions from Government. This was a view which, I need hardly say, found admirable support from my financial advisors, and we have accordingly, sold you the present site at full value, merely making some concession in the way of installments.

The site which we have sold was a forest site of extraordinary value to us. We were exceedingly loath to part with this plantation which served a very useful

⁵⁷ By Own Correspondent. (1922). Lahore's Model Suburbs, Settlement of Land Acquisition, Solid Progress. *Civil and Military Gazette* [Lahore]. 19 May. p.14.

⁵⁸ Whitley, J. H. (1931). *Report of the Royal Commission on Labour in India*. Vol. XV. London: H.M. Stationery Office. p. 403.

⁵⁹ Gorrie, R. M. (1924). The Irrigated Plantations of Punjab. *Empire Forestry Journal*. Vol. 3. No. 1. p. 244.

⁶⁰ Ibid.

purpose. You can realize then how much we valued the experiment which you are making, when we consider it worth the sacrifice of so valuable a property.⁶¹

Hence it was decided to transfer possession of the land to the Society on payment of 10 percent, and the remainder amount was to be paid in installments⁶². It took nearly two years for the transfer of land to the Model Town Society, and the possession of land was granted in January 1923⁶³.

The process of site acquisition also gives an insight into the working on a collaborative project by the Government and the governed. Historically Indians have been renowned for keeping extensive written records, as Campbell has pointed out:

In no country is manuscript cheaper or more expeditious, and in no country are written documents more largely used in all common affairs of life-agreements, receipts, accounts, statements of evidence &c &c.⁶⁴

The British government in India followed similar strategies in record keeping because the bottom level employees were used to the earlier practices, hence:

In India all business is conducted in writing to an extent quite beyond anything known in this country, even in our most important courts of record. There is more official writing and recording in a case of petty theft in our Indian police office than in the gravest case in Westminster hall. All petitions, statements, applications of every description, are filed in writing; all evidence is recorded in writing, and all orders and instructions of every kind are written and signed...a minute record is necessary for future reference, to show what has been done and on what grounds.⁶⁵

⁶¹ By Own Correspondent. (1924). Lahore's Model Town, Foundation Stone of First Building Laid. *Civil and Military Gazette* [Lahore] 12 April. p.10.

⁶² By Own Correspondent. (1922). Lahore's Model Suburbs, Settlement of Land Acquisition, Solid Progress. *Civil and Military Gazette* [Lahore]. 19 May. p.14.

⁶³ By Own Correspondent. (1924). Lahore's Model Town, Foundation Stone of First Building Laid. *Civil and Military Gazette* [Lahore] 12 April. p.10.

⁶⁴ Campbell, G. (1852). *Modern India. A Sketch of the System of Civil Government. To which is Prefixed Some Account of the Natives and Native Institutions*. London: John Murray. p. 60.

⁶⁵ Campbell, G. (1852). *Modern India*. pp. 256-7.

This practice was possible only because of the 'facility of cheapness of the labour of the clerks and the facility and brevity of the Persian character'⁶⁶ [in writing]. Although all business was transacted, correspondences carried on and accounts kept by the executive officials were in English, the business of the district officers and everything downwards was entirely transacted in native languages⁶⁷. This exercise caused confusion as the true meaning was lost in translation. In case of the Model Town we see considerable delays just because of these matters. But in the end Khem Chand was able to achieve his goal despite all the difficulties and his fate did not follow the usual "So men die and die still of *red tape!*"⁶⁸ scenario.

In the end, Khem Chand was able to convince all the concerned Government departments, and hence moved on to the next stage, that is, the design of the Model Town.

Design Competitions

Diwan Khem Chand proposed his ideas about the layout plan of the Town in his first pamphlet as follows:

The town should be square in shape. In the centre of the town there should be a flower garden of 35 *bighas* (about 17.5 acres)⁶⁹ and around the garden there should be a circular road, and on the circular road there should be located the stores, market, post office, etc. Then covering them should come the boys' school and girls' school, nursery, the clubs and the hospital. All these public buildings, being in the centre of the town.⁷⁰ ``

The houses were proposed to be located in four concentric hollow squares round the public portion of the town. According to this method, all the public places would be equidistant from the residential houses, and there would be

⁶⁶ Campbell, G. (1852). *Modern India*. p.257.

⁶⁷ Campbell, G. (1852). *Modern India*. p. 256.

⁶⁸ Napier, C.J. (1853). *Defects, Civil and Military, of the Indian Government*. p. 204.

⁶⁹ In Punjab 2 bigha= 1 acre. See Ram, G. (1927). *Pocket Book of Engineering*. 5th ed. Lahore: The Civil and Military Press. p.11.

⁷⁰ Chand, D.K. (1922). *The Model Town*. Part I. p. 12.

neither side streets nor bye- lanes.⁷¹ In order to obtain good layout plans the Society decided to advertise for a layout plan and award a substantial prize to winner.⁷²

In this quest, the Society offered a prize of Rs.1200 (£120)⁷³ for a layout plan that could be adopted for India's first garden city to be built in the suburbs of Lahore. The intended competitors were supplied with a site plan and the requirements of a town. Subsequently, a large number of 'interesting and instructive designs' were received.⁷⁴ The decision to undertake a design competition for town planning purposes was heavily praised. The Times of India reported it as:

The decision of the Model Town Society of Lahore to offer a prize for the plan of a garden town of a thousand bungalows to be erected near Lahore is a sign of the demand for better living conditions which is felt all over India today. An improvement in the social conditions is essential if the population as a whole is to become contented, and among the first needs is the need for better accommodation and more congenial surroundings.⁷⁵

The Society received thirty-two plans under pseudonyms⁷⁶ which were displayed for exhibition to the members of the Society on the 17th and 18th December 1922, and later to the general public in Sir Ganga Ram's new building on The Mall for a fortnight⁷⁷. On the first day, i.e. Sunday the 17th, Sir Edward Maclagan visited the exhibition which in its due course attracted a very

⁷¹ By Own Correspondent. (1922). Lahore's Model Suburbs, Settlement of Land Acquisition, Solid Progress. *Civil and Military Gazette* [Lahore]. 19 May. p.14.

⁷² Ibid.

⁷³ According to Exchange rate for 1920, 10 Indian Rupees = 1 British Pound.

⁷⁴ Associated Press. (1923). Lahore's Model Town, Main features of lay-out plan, Scheme approved by Government. *Civil and Military Gazette* [Lahore]. 19 May. p.10.

⁷⁵ By Own Correspondent. (1922). Lahore House Shortage. *The Times of India* [Bombay]. 19 May. p.7.

⁷⁶ By Own Correspondent. (1922) Model Town's Plans Exhibited. *Civil and Military Gazette* [Lahore]. 20 Dec. p.9.

⁷⁷ Associated Press. (1923). Lahore's Model Town, Main features of lay-out plan, Scheme approved by Government. *Civil and Military Gazette* [Lahore]. 19 May. p.10.

large number of visitors, and a good many of them made suggestions in a book kept there specifically for this purpose.⁷⁸

However, the design of this new town was merely a straightforward selection as there was no consensus on the winner as reported in the newspaper:

Some plans are good but not altogether satisfactory, and for this reason it is possible that ideas suitable for the Model Suburb will be taken from several plans and the prize divided among those who have submitted them.⁷⁹

Hence, the plans were judged by the Designs Committee of The Society, however it was not able to select any one plan which could be adopted as a whole for the town. Consequently, The Committee selected the following four plans which give interesting suggestions:

- ‘*Dilnagar*⁸⁰’ by Mr. G. K. Trilokekar, Architect, Bombay;
- ‘Commonsense’ by Mr. S. C. Paul, Architect, Calcutta;
- ‘Jupiter’ by Mr. N. L. Verma, Architect Allahabad; and
- ‘Dilemma’ by Dr. J. B. Sahni Lahore.

The prize of Rs. 1,200 was divided among the above plans in proportion to the suggestions taken from them. The committee entrusted the work of combining the commended plans to Mr. N. L. Verma; one of the prize-winners who spent nearly a month on the work and finally produced an “excellent plan”. For this additional work he was awarded a further Rs. 500.⁸¹ (Details will be discussed later in Chapter Urban Form). Due to the success of this competition the Society launched a further competition for design of houses. (discussed later in Residential Architecture).

The Inauguration

The Society was inaugurated with a foundation laying ceremony for its first public Bbuilding, a Gentlemen’s Club, in the afternoon of April 11, 1924. A

⁷⁸ Ibid.

⁷⁹ Ibid.

⁸⁰ From Urdu/Hindi, meaning a place where one’s heart lies.

⁸¹ Associated Press. (1923). Lahore’s Model Town, Main features of lay-out plan, Scheme approved by Government. *Civil and Military Gazette* [Lahore]. 19 May. p.10.

welcome address by Raja Narendra Nath, the first President of the CMTS was followed by a speech from Governor Sir Edward Maclagan who laid the foundation stone. In accordance with the usual ceremony on such occasions a bottle containing all the daily papers of Lahore of the 11th Instant, and a collection of Indian coins of that period was placed in a cavity, which had been made in the foundation stone. The ceremony ended with a tea party as per standard norms.⁸² Many notable people attended the ceremony including Sir John Maynard, Sir Ganga Ram, Mr. Justice Moti Sagar, members of the Punjab Engineering Congress, Dewan Kishen Kishore, Diwan Khem Chand and members of the Executive Committee of the Society.⁸³

Construction of the Town

When Diwan Khem Chand published his 'Scheme for a Model Town' in 1919 where he outlined the salient features of his proposed garden suburban town he was quite unsure of the general response that he would receive from people from various backgrounds and positions⁸⁴. However his surprise was evident when he got tremendous enthusiasm from prospective members who desired to live in his proposed Town⁸⁵. The Model town was intended to be built near Lahore, and it was sought to combine a quiet life, away from the nerve shattering commotion and bustle of Lahore, with richness in all the amenities of modern life.⁸⁶ The Society with its very influential membership at the very start enlisted the active support of the Government. The Government, as a measure of its support to the society, agreed to sell to the society the planted area at Kot Lakhpat, covering 1,963 acres. Within a year membership rose to 439, and with the proverbial enthusiasm of an ambitious start the society announced a design competition and offered a prize of Rs. 1200 for the best lay-out of the town.

⁸² By Own Correspondent. (1924). Lahore's Model Town, Foundation Stone of First Building Laid. *Civil and Military Gazette* [Lahore] 12 April. p.10.

⁸³ Ibid.

⁸⁴ Chand, D.K. (1922). *The Model Town*. Part I. p. 15.

⁸⁵ Ibid.

⁸⁶ Discussed later in Chapter 3.

The early enthusiasm of its founders helped in development of the Town at a very rapid scale.⁸⁷ By 1923 membership increased to 709 and the construction of tube-well had been completed.⁸⁸ By 1924 the membership of the town had risen from 701 to 789, the plan of the town had been demarcated on the ground, allotment of the houses had started and the first public building of the town, a Gentlemen's Club, was inaugurated by the Governor.⁸⁹

By 1926 the Town had completed a large club, twelve residential houses, and a number of shops and quarters.⁹⁰ A school, a post office, and a library for the use of twelve members and a total population of eight hundred had been started.⁹¹ By 1928 the annual report of the Town proudly exclaimed that its 849 members were mainly from *upper, middle and professional classes* and it had fifty seven residential houses finished or under construction, its club-house, post office, dispensary, tube-well, motor service, and its six miles of metalled roads represented a remarkable achievement.⁹²

Unfortunately there are no further details available about the progress in construction of the Town due to unavailability of any primary or secondary sources.

Financial crisis

The early enthusiasm of the Model Town developers did not last long. In 1929 the Society borrowed from the Lahore Central Bank to pay off the Government debt and claimed that things had improved.⁹³ However, the very next report informed that the Society passed through a critical period owing to careless handling of its affairs and divided counsels.⁹⁴ As a result a strong committee

⁸⁷ Cooperative Model Town Society Lahore. (1925). *Annual Report for the Year 1924*. as cited in Ullah, A. (1937). *The Co-operative Movement in the Punjab*. London: G. Allen and Unwin. p.318.

⁸⁸ Ibid.

⁸⁹ Discussed earlier in this Chapter.

⁹⁰ Ullah, A. (1937). *The Co-operative Movement in the Punjab*. p. 319.

⁹¹ Ibid.

⁹² Cooperative Model Town Society Lahore. (1929). *Annual Report for the Year 1928*. as cited in Ullah, A. (1937). *The Co-operative Movement in the Punjab*. p. 319.

⁹³ Cooperative Model Town Society Lahore. (1930). *Annual Report for the Year 1929*. as cited in Ullah, A. (1937). *The Co-operative Movement in the Punjab*. p. 319-320.

⁹⁴ Cooperative Model Town Society Lahore. (1931). *Annual Report for the Year 1930*. as cited in Ullah, A. (1937). *The Co-operative Movement in the Punjab*. p. 320.

was appointed to set its house in order.⁹⁵ During 1931, owing to lack of continuity of policy due to too frequent change in presidents necessitated by factors beyond the control of the Society, the progress made was not at all satisfactory.⁹⁶ Hence:

The fate of the Lahore Model Town Society afforded one of the saddest instances of the failure of a magnificent start. The Model Town Society which sprang out of a magnificent conception, was lavishly subsidized by the Government, and is now going to wreck and ruin with all the brains of Lahore at disposal.....⁹⁷

The founder of the Society, Diwan Khem Chand, was removed from his office during the course of year.⁹⁸ The Society was running at a loss in all its branches, it was frittering away its assets; and its defaulters included some eminent nobilities of Lahore and elsewhere. The Model town was on a high road of insolvency.⁹⁹

By 1934, however, the Society was nearly wiped out. A committee, appointed by the Department of Co-operative Societies, investigated the affairs of the society, which instead of improving had turned out a source of extreme anxiety to the Department. The report for 1934 made the following revelation:

...the Society should never have been registered as its members were not men of moderate means. Comments needless.¹⁰⁰

After the first flush of enthusiasm the development of the town had been rather slow. The funds accumulated from sale of land were not adequate to meet the cost of efficient services to the town.¹⁰¹

⁹⁵ Ibid.

⁹⁶ Cooperative Model Town Society Lahore. (1932). *Annual Report for the Year 1931*. as cited in Ullah, A. (1937). *The Co-operative Movement in the Punjab*. p. 320.

⁹⁷ Ullah, A. (1937). *The Co-operative Movement in the Punjab*. p. 320

⁹⁸ Ibid.

⁹⁹ Ibid.

¹⁰⁰ Cooperative Model Town Society Lahore. (1935). *Annual Report for the Year 1934*. as cited in Ullah, A. (1937). *The Co-operative Movement in the Punjab*. p. 321.

¹⁰¹ Sain, K. (1978). *Reminiscences of an Engineer*. New Delhi: Young Asia Publications. pp. 46-8.

But this was not the end of the town. Despite these discrepancies, the members of the society settled in the Town as proud house owners and made a life for themselves.¹⁰² Their lives might have continued to be so had they not been interrupted by the act of partition, a price for which they had to pay the price by leaving the town they built behind and seeking life in a new land from scratch¹⁰³. With its original residents gone, Model Town became a home to many others who had been uprooted from the other side of the border and to many locals who had seized the opportunity of acquiring pricy land at low cost during the turmoil. Its history was forgotten, and the only evidence of its proud history that remained behind was its magnificent built environment.

Conclusions

The legacy that Diwan Khem Chand left behind in the form of Model town Lahore can be regarded as a crucial landmark in the urban development of the Indo-Pak subcontinent. As an idea conceived and developed by the native people during the Raj, it gives an insight into the colonial influences on vernacular urban development beyond the notions of 'mimicry' and 'colonization of culture'. Instead it imparts how colonial modernities were influencing the native thinking and how those who were willing to adapt to change were practically illustrating a new face of 'acculturation'. It also contradicts with the usual perception of the oppressed native population in the colonial cities as depicted by many western post-colonial authors. Instead what it brings forwards is a progressive class, willing to work in collaboration with the Government and at the same time trying to accustom their traditions with modern developments. The urban form of this Town is discussed in the next chapter.

¹⁰² Discussed later in Chapter 6.

¹⁰³ *ibid.*



CONTENTS	Size, Scale and Form
	Salient features of the Plan
	Analysing the Plan

We understand cities and landscapes in two way; either from our own personal experience or the way they have been reported by others. The underlying structure of the built landscape is dependent on both the social and the natural worlds where both of these methods have a reciprocal effect on each. Design of a city, however, is dependent on all major forms of knowledge like science, values and arts. Science in the form of forces of nature determines the form of the city and the activities that can be undertaken in it. Knowledge of values is crucial as city design is concerned with the human experience and the ideals, customs, perceptions and cognitions, memory, attachment, and dependencies of a society. But it is the Art that brings the spiritual dimension to the process of city design as a form of seeing, expressing and interpreting. Thus

Cities are not a form of art, but the process of city design involves the art of creating cities that heighten daily experiences, preferably good experiences...¹

In this context, this chapter is about understanding the urban form of the Model Town. This will be undertaken by analysing the underlying geometry in the plan as well as the spaces provided for various activities and how those spaces related to the prospective residents of the town. The aim of this exercise is to understand the Model Town as it was conceived, planned and developed in its early days and how these factors help us in understanding the dynamics of a rising local bourgeoisie class, its aspirations and desires.

Size, Scale and Form

The best interpretation of Howard's garden city ideals were focussed on developing new form of town by utilizing facilities of modern technology without sacrificing the social advantages of a historic city.² Hence with reference to the shape and size of his proposed town, Diwan Khem Chand had written;

¹ Bosselmann, P. (2008). *Urban Transformation: Understanding City Form and Design*. Washington: Island Press, xix.

² Lewis Mumford in Osborn, F.J and Whittack, A. (1963). *New Towns*. London: McGraw-Hill. p. 2.

My idea is that the town should be square in shape. In the centre of the town there should be a flower garden of about 35 bighas³ (17.5 acres), and around the garden there should be a circular road, and on this circular road should be located, the Stores, the Market, Post office, etc. Then covering them should come the Boy's school, the Girl's school, the Nursery, the Club and the Hospital. All these public buildings being in the centre of the town; the houses will be located on four roads in concentric square rings around them.⁴

Based on these guidelines the Society arranged a design competition and eventually Model Town was planned after combining ideas from four short-listed plans (discussed earlier in Chapter 3). Unfortunately none of the paperwork from this competition has survived. Hence many of the historical and architectural aspects about the planning of this town remain unknown and will remain so due to lack of supporting evidence.

The most striking feature of the plan is its perfect and symmetrical geometry. The Town is square in shape with each side equal to 1.33 miles⁵, **5-2, 5-3**. There is large circular garden in the centre surrounded with a ring of spaces allocated for public and commercial buildings and areas.

On the periphery there is a circular road 2 miles in length and named as *The Mall*. Beyond the Mall are the eight residential blocks, which are designed as mirror images of each other. The blocks are separated from each other through diagonal roads and rectangular gardens. These residential blocks terminate at a square road marking the edge of the residential district. Beyond this square road are the fruit gardens and ancillary spaces (All these are discussed in detail later in this chapter). This 'romance-laden geometry'⁶ clearly depicts a 'disciplined flight of imagination that is the dream of architects and town

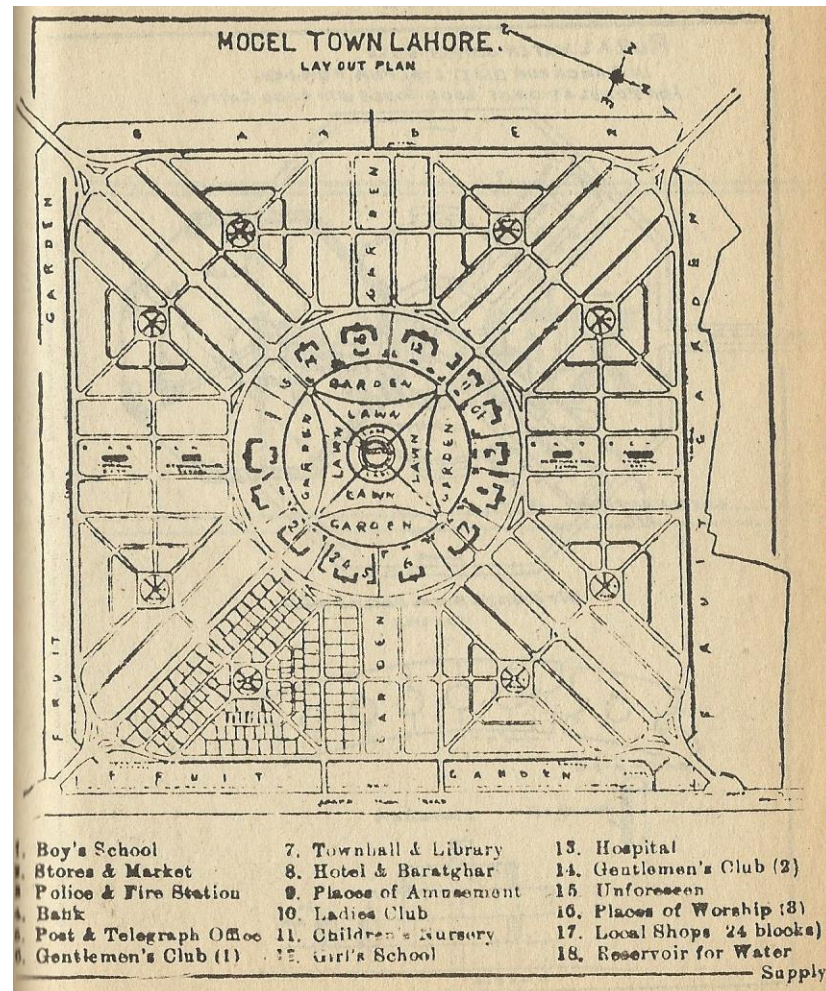
³ In Punjab 2 bigha= 1 acre. See Ram, G. (1927). *Pocket Book of Engineering*. 5th ed. Lahore: The Civil and Military Press. p.11.

⁴ Chand, D.K. (1922). *The Model Town*. Part I. Lahore: Central Press. p.12.

⁵ A common perception about the town is that its outer circular road is 6 miles in perimeter giving each road as 1.5 miles. See Vandal, P and Vandal, S. (2006). *The Raj, Lahore and Bhai Ram Singh*. p. 100. However from the dimensions on the plan drawing (1937) it can be calculated as 7031 ft. (2343 yards or 1.33 mile) for each side.

⁶ Vandal, P and Vandal, S. (2006). *The Raj, Lahore and Bhai Ram Singh*. p. 85.

planners⁷. In the absence of any design brief, it is difficult to comment on exactly how the plan evolved. In order to understand the physical design of the Town, a basic geometrical analysis has been used to understand how different spaces were conceived.



Drawn by: Sir Ganga Ram

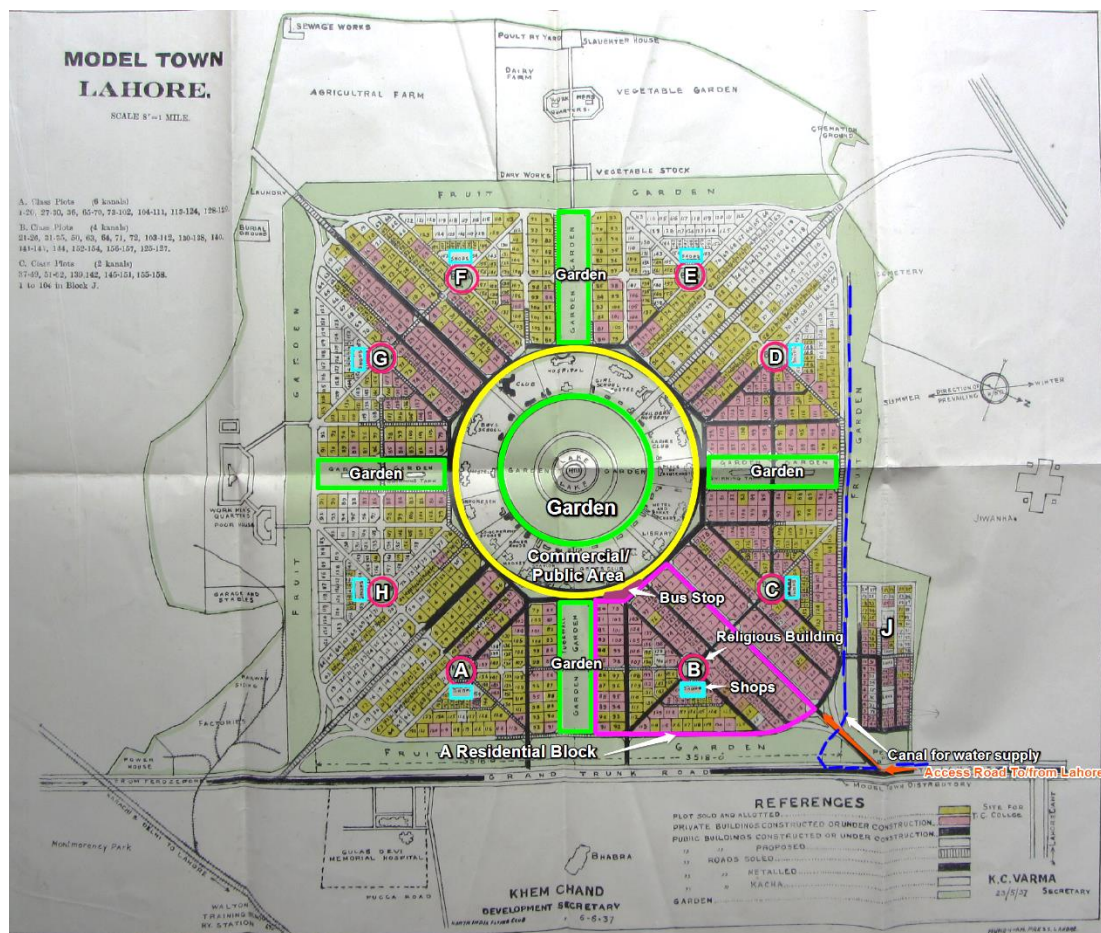
Pocket Book of Engineering (5th ed.)

1927.

5-2 Earliest Printed Plan of Model Town 1927.

The CMTS doesn't have any copy of the original plan and hence it is relying on computerized duplicates produced by local estate agents. This is the earliest printed plan of Model Town available which shows the basic layout of the town, detail of a single residential block and the facilities provided.

⁷ *ibid.*



Drawn by: Unknown (text and labels superimposed by Shama Anbrine)

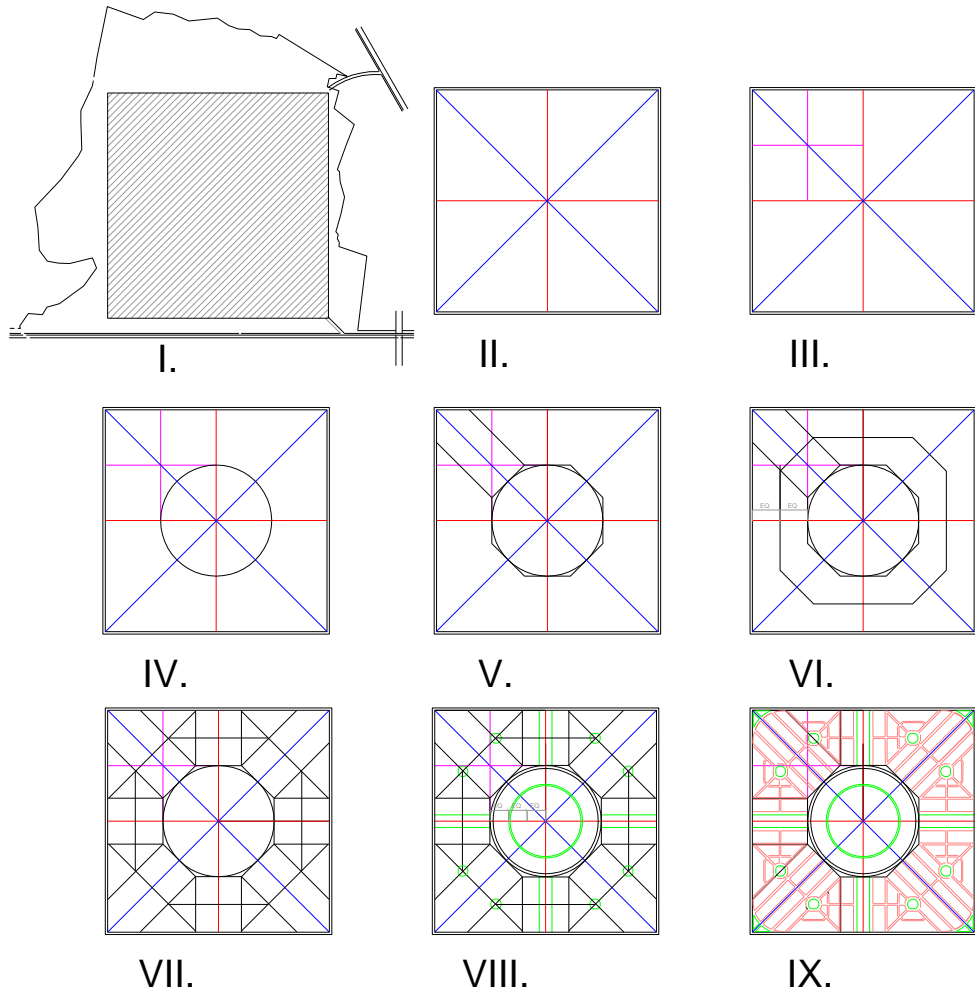
Emmy Eustace

c. 1937

5–3 Plan of Model Town 1937

This plan has been acquired from personal papers of John Curtis Weinher Eustace C.I.E (1906-1972) who served in Indian Civil service from 1929 to 1947 and just before his departure in 1947 was the District Magistrate⁸ in Lahore. His paperwork is maintained by his daughter Emmy Eustace, who posted an image of this map along with many other photographs of his father's time in India on Flickr in May 2011. (See Annexure 1 for larger map)

⁸ Unknown Author. (1947). Thousands Flee From Lahore. *New York Times*. 19 May. p. 3.



Drawn By: Shama Anbrine

2013.

5-3 The Geometry behind the Plan

This diagram tries to understand how an irregular site was transformed into a perfect geometry in 2D. Each step has been calculated by superimposing several geometrical proportions in a 'trial and error' process to relate the different spaces with respect to area allocation.

I. The site was an irregular piece of land, so apparently at first the architect carved out a square within it, 5-3 (I). This was a common practice in Mughal and later PWD architecture whereby only regular square or rectangular shapes were used within an irregular site for construction. This square was aligned to the adjacent main road rather than cardinal axis due to convenience rather than any philosophical principles⁹. A 75' wide road was drawn on the periphery and the resulting inner square had each side equal to 1.33 miles. In other words the sides of the square were at a distance of 1138 yards or nearly two-thirds of a mile from the centre at the minimum point. Ebenezer Howard defined this dimension for his proposed Garden City as three-quarters of a mile¹⁰ and, since both these figures are quite close, it was a probably not a mere coincidence as the architect had adhered to Howard's model more faithfully and comprehensively.

II. According to the preliminary design brief (discussed earlier in this chapter) the town was proposed to have a circular garden in its centre surrounded by a ring of public and commercial buildings. With a square town with circular centre, the final plan was achieved by divided into four quadrants which were further subdivided diagonally resulting in eight triangular parts, 5-3 (II)

III. By dividing each quadrant into four parts, a circular centre was carved, 5-4 (III) (IV). This demarcated the area for the public and commercial buildings and the central garden. The remaining parts of the triangular regions were named alphabetically from A to H in counter-clockwise direction to accommodate the residential blocks.

IV. Beyond this circle the planning was done by using a circumscribed regular octagon, 5-4 (V).

⁹ *Vaastu* [The ancient Indian architectural philosophy] is not just architecture but a religious ritual. It has strict principles which define conformity to cardinal axis and placement of all building elements in a special arrangement. For details see Dwivedi, B. (2000). *Environmental vaastu*. Delhi: Diamond Pocket Books; Silverman, S. (2007). *Vastu: transcendental home design in harmony with nature*. Layton (Utah): Gibbs Smith; Chakrabarti, V. (1998). *Indian Architectural Theory and Practice: Contemporary Uses of Vastu Vidya*. Surrey:Curzon Press.

¹⁰ Howard, E. (1902). *Garden Cities of Tomorrow*. London: Swan Sonnenschein and Co. p. 22.

V. By equally dividing the horizontal (or vertical) distance between the central circle and outer square an octagon (with chamfered sides equal to that of the circumscribed octagon drawn earlier) was drawn, 5-4 (VI). The corners of this second octagon became the centres of each residential block. At these corners a nearly circular green space was provided which was reserved for religious buildings. It was perhaps because of this large circular centre and eight small satellite circular spaces that the architect had named his plan Jupiter (discussed earlier in Chapter 3).

VI. Each quadrants was divided into two residential blocks. Each block was divided in such a way that maximum number of rectangular plots (discussed later in detail) could be accommodated. Hence the main roads were either horizontal, vertical or diagonal. There are no radial roads except the central circle. Each quadrant is separated from other by rectangular gardens, 5-4 (VII).

VII. The radius of the central circle was divided into 3 parts, 5-4 (VIII). The outer ring comprising of one part radius was reserved for the commercial and public buildings whereas the inner circle comprising of two parts radius was the central garden.

Thus resulting in a plan that is perfectly symmetrical along horizontal, vertical and diagonal axes, 5-4 (IX).

Why a Geometrical Plan?

This perfect geometry has never failed to impress residents and visitors alike, but at the same time gives way for many questions. It is not a common practice to plan a city in such a manner. All cities, whether planned or unplanned, have natural geographical constraints that resist symmetry and geometry. Similarly pure geometry of a plan is only something that can be experienced in a two-dimensional plan drawing. In an urban landscape, the collective aura of a space is a multi-dimensional experience. In this context, why the administration of the Model Town opted for a geometric plan can be attributed to several reasons.

(1) Just like the idea of a Model Town itself, the physical plan was also intended to create a symbolic perfection on ground. Use of a perfectly

geometrical plan served this purpose very well. Khem Chand always wanted his town to be square in shape, and hence this was a very important factor when he was looking for suitable sites. The site chosen was a virgin site, and historically until the early twentieth century there have been very few cities which have been built on a virgin site.¹¹ The flat topography of the proposed site, in the absence of any built form, was like a blank canvas adaptable to any form and geometry. In order to convince the Government for support the members of the CMTS must have had the desire to physically exhibit that the town was actually a novel experiment. Since the first impression of the proposed town was to be from the plan, a perfect plan must have helped them in getting the required publicity and support.

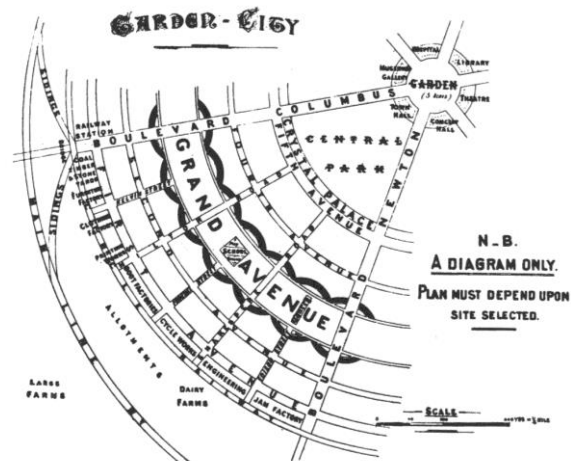
(2) Model Town is an excellent example of a garden city in terms of the facilities. At the first glance, however, the plan appears to be an exact replica of the garden city model diagram which was intended as guideline only, 5-4. It is only when the plan is scrutinized in detail that the subtle differences become evident. Yet, the influence of the physical characteristics of the garden city model can be seen in the form of a large circular centre. However, the rest of the geometry is radial only to the extent of clear horizontal, vertical and diagonal divisions of the outer square.

Drawn by: Sir Ebenezer Howard

Garden Cities of Tomorrow (1902)

1902

5-4 The Garden City



When Sir Ebenezer Howard presented his Garden City Model in Tomorrow A Path to Peaceful Reform in 1896, amongst many factors, it was criticised for its layout as many people mistook the flow diagrams as plans. In later editions of the book, he rectified this by putting a note with these diagrams which stated, 'A DIAGRAM ONLY Plan must depend upon site selected' in order to avoid the confusion.

¹¹ Unknown Author. (1912). The New Capital of India. *The Town Planning Review*, No. 4. January. p. 247.

(3) The idea of a radial town plan has been advocated long before Howard's times and has been an essential part of many ideal plans since ancient times. Vitruvius has been acclaimed to favour radial streets in comparison to Roman grid iron cities which many claim to be a misinterpretation of his complicated ideas¹². Sasanian city of Gur (third century AD - Persia) ¹³ and Al Mansur's Baghdad (762 AD - modern Iraq) also followed radial plans due to cosmic superstition¹⁴. It was the renaissance city, however, where star-shaped and radial town plans became popular though many of them were not materialised¹⁵. During the nineteenth century many theorists like James Silk Buckingham and J. Madison Allen proposed ideal towns based on radial patterns, 5-5, 5-6. With the advent of modern transportation modes, many planners favoured fan-like or radial systems in lieu of grid-iron for ease in travelling. By the advent of twentieth century most modern western capitals including London, Paris, Berlin, Vienna and Washington had been planned on this system¹⁶. One core element of these radial plans was the location of a central zone with public amenities and administrative buildings while the residential areas were located on the periphery.

Similar strategies were adopted in colonial Lahore within the cantonment in 1850's. Basil Martin Sullivan's Plan for GOR-I (Government Officers' Residences-I) (1918) also comprised of a core of public buildings like schools for boys and girls and offices in the centre of the town. In short, the planners of the Model Town had contemporary physical examples of good town plans nearby to have inspiration from.

¹² Hall, T. (1997). *Planning Europe's Capital Cities*. London: E & FN Spon. pp. 57-58.

¹³ Gerster, G. and Trümpler, C. (2005). *The Past from Above*. Los Angeles, CA: J. Paul Getty Museum. p. 70.

¹⁴ Tuan, Y. (1990). *Topophilia*. New York: Columbia University Press. p. 160.

¹⁵ Hall, T. (1997). p. 15-17.

¹⁶ Mitchell, C.H. (1914) Town Planning and Civic Improvements. *Applied Science incorporated with the transactions of the University of Toronto engineering Society*. Vol 8. No.12. p. 286-9.

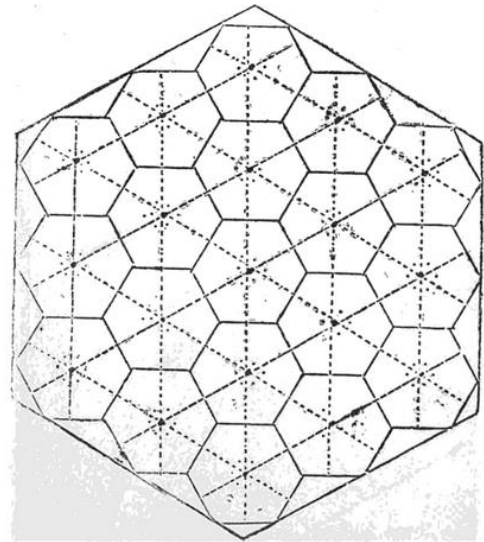
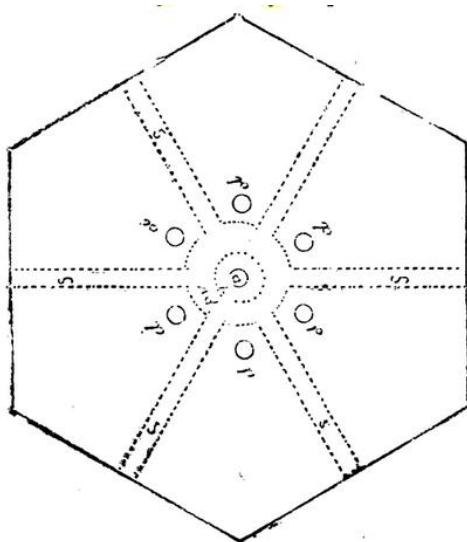
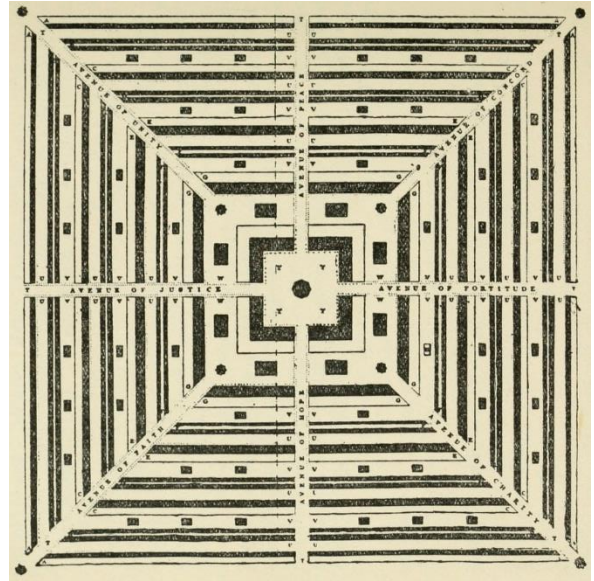
Sketch by: James Silk Buckingham

National Evils and Practical Remedies:
With the Plan of a Model Town

c. 1849

5-5 Buckingham's Model Town 'Victoria'.

While Buckingham's model town was a social project, in plan form it was a perfect square divided into eight identical residential segment with a central public square.



Designed by: J. Madison Allen of Ancora N.J.

Practical Applications of the Elementary Principles of "True Civilization", to the Minute Details of Everyday Life

c. 1873

5-6 An Ideal Town Plan by J. Madison Allen

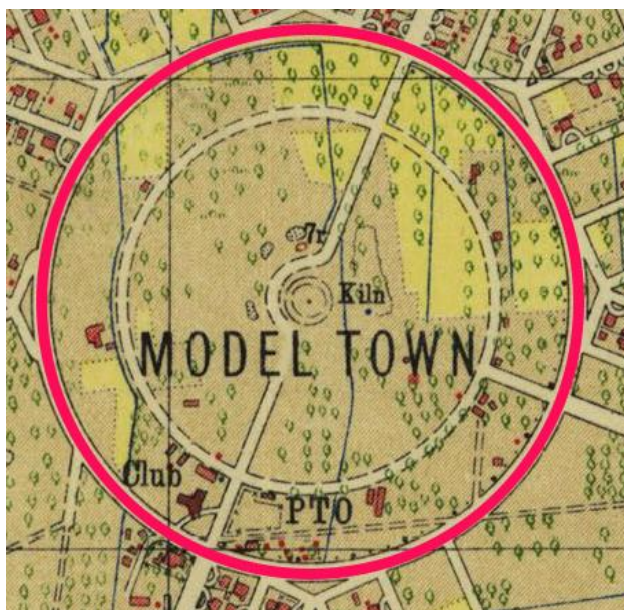
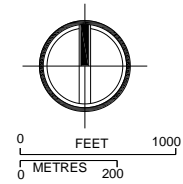
According to Josiah Warren an ideal plan that satisfied all basic requirements was designed by J. Maddison Allen as a central core of public buildings with a yard around it followed by a circular street beyond which were the dwelling clusters for families. The radial streets separated one cluster from another and the same pattern could be replicated for further development of the area in a honeycomb manner.



I. Cantonment



II. GOR-1



Guide Map of Lahore

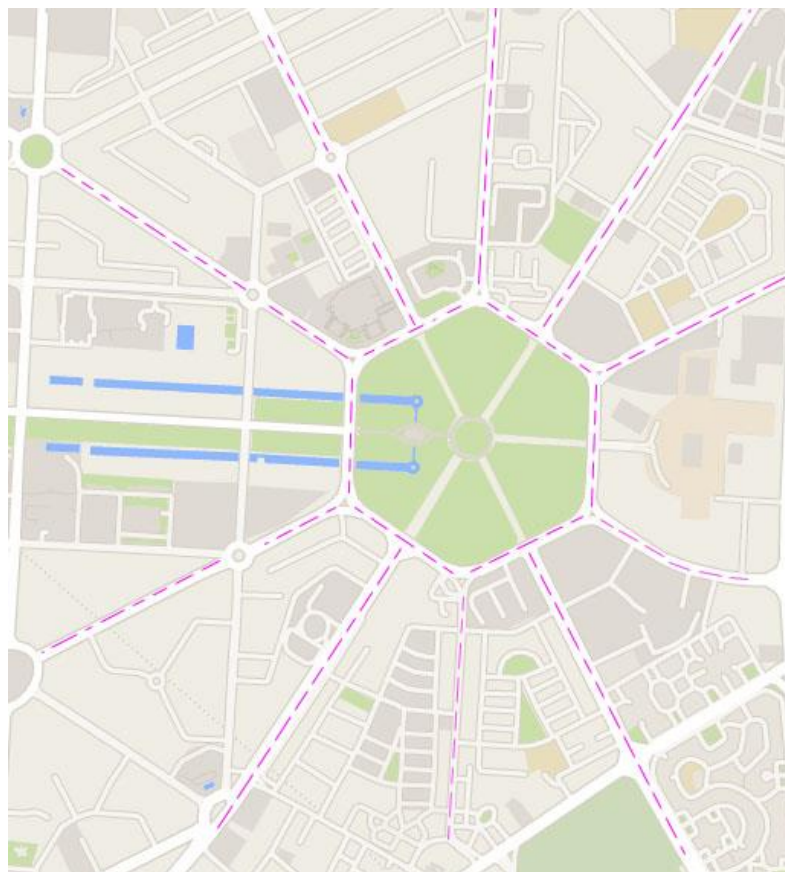
British Library

c. 1931.

III. Model Town

5-7 A Comparison of the Central Cores in Garden City (like) developments in Lahore

British developments in Lahore, the Cantonment and the GOR had a central core which comprised of public buildings set in a vast garden. These varied as the cantonment had a church and a club, while the GOR had schools for boys and girls and offices.



Demarcation by: Shama
Anbrine

Google Maps

2013.

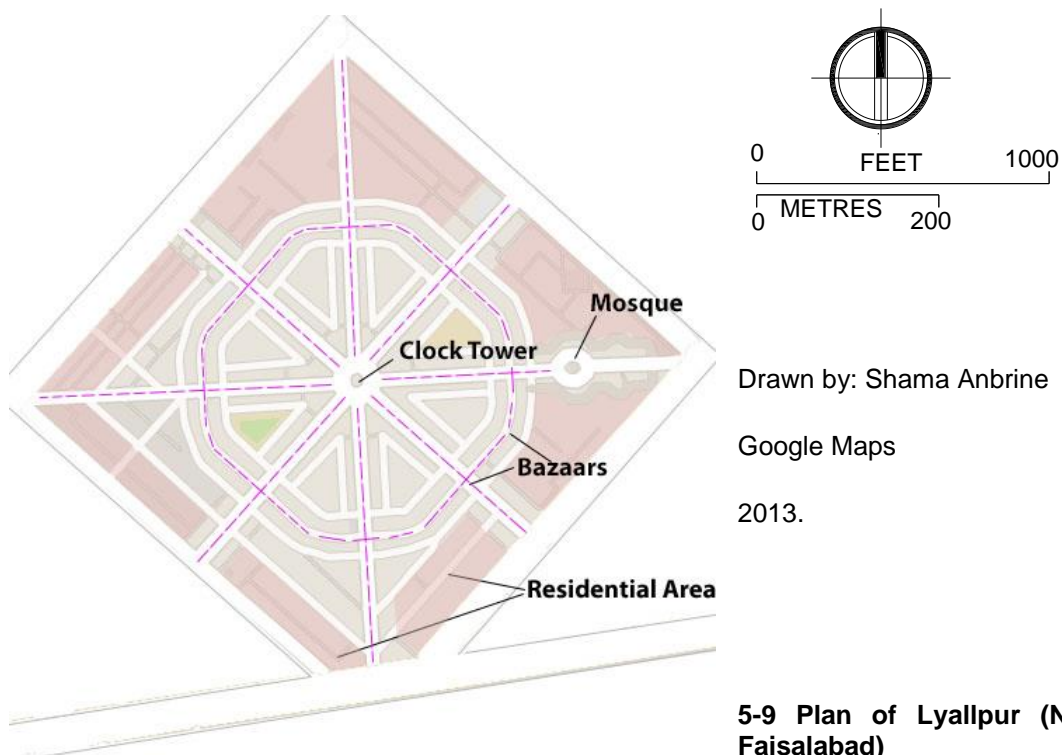
5-8 Part Plan New Delhi

One of the highlights of the plan of New Delhi by Edwin Lutyens and Herbert Baker is the hexagon shaped green space divided into several gardens, surrounded by a hexagon road from which several radial roads emerge.

(4) Perhaps the biggest inspiration was the plan of New Delhi by Edwin Lutyens and Herbert Baker which has been regarded as one of the most influential garden cities¹⁷ and the most celebrated urban development in the colonies. Although New Delhi was inaugurated in 1931 much later than Model Town, its planning had commenced in early 1910's. It is one of the best examples to illustrate how the Garden City model used in the colonies for capital cities was more royal and monumental in character as compare to the garden cities in the UK where their nature was more suburban and sublime. An important feature of these colonial garden cities; New Delhi, Canberra and later Tel Aviv; was the grand geometrical central core connected to the other parts of the city through radial roads. In case of Model Town however we see

¹⁷ Crinson. M. (2003). *Modern Architecture and the End of Empire*. pp. 66-67.

inspirations from both; in places it is monumental and grand, yet it was developed as an exclusive suburban development.



Lyallpur (1912) was designed by Sir Ganga Ram as a city emerging from a central Clock tower. The main part is a commercial zone comprising of eight radial bazaars and a circular bazaar with a residential area on the periphery.

(5) According to Prakash Tandon, the regularity and geometry of the town reflected the regular and well-ordered lives of its residents¹⁸. Amongst the early members of the Society there were several well-known engineers. Most senior among them was Sir Ganga Ram who had planned Lyallpur (now called Faisalabad) in 1912 in a similar geometric plan. However, it was not as perfect a square on one side due to existing main road and one of its diagonals was altered later to accommodate a mosque. Yet, due to his active participation in works of the society from very early times, it is possible that he actively guided towards the final plan of the Model Town.

¹⁸ Tandon, P. (1968). *Punjabi Century 1857-1947*. London: Chatto and Windus. pp. 236-243.

6. If looked from the administrative viewpoint, the plan offered all the facilities of a modern town. The straight and connected roads offered easy flow for vehicular traffic as well as placing the services like sewers, water supply and electricity lines. Similar residential blocks implied that design of one prototype block could be easily replicated across all the residential area.

With such great examples of town planning, it is no surprise that the management committee of the Model Town also wanted a town which was much more than just a place to accommodate housing shortage. It was designed to satisfy their need for orderly planning which would set them apart from other areas of the city which had grown organically and abstractly and perhaps most importantly, without any proportions, as well as help them benefit from the latest facilities.

Salient features of the Plan

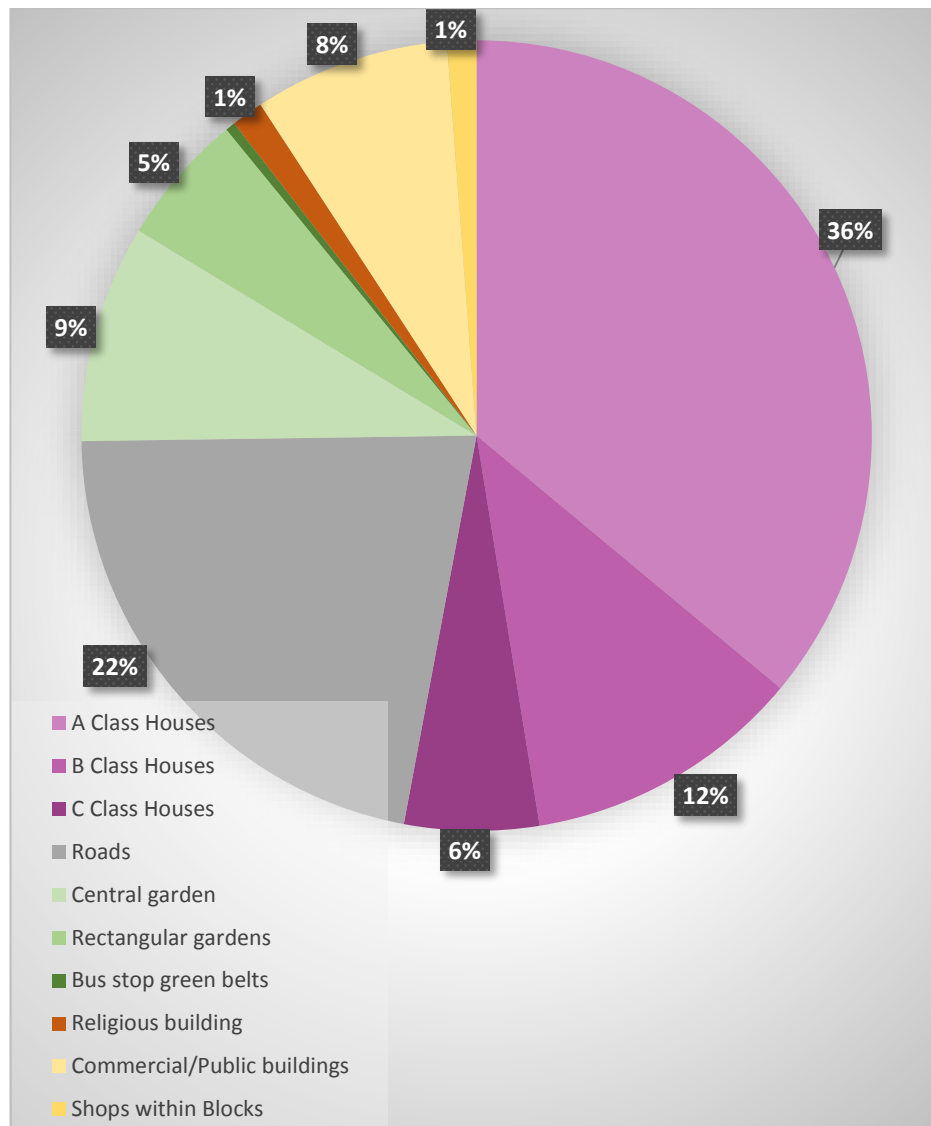
The final plan of the Town offered a luxurious garden suburb which reserved 54 percent area for residential purposes, 1 percent for religious buildings, 22 percent for the road network, 9 percent for public and commercial buildings, and 14 percent area was allocated for gardens and green spaces, **5-10**.

Within these areas, there was further segregation based on sizes and location of different types of activities, **5-11**. The following description discusses these salient features in detail.

Sr. No.	Activity	Area (acres)	%
1.	Residential	726	54
2.	Commercial/Public buildings	126	9
3.	Roads	299	22
4.	Public Gardens	205	14
5.	Religious buildings	18	1
<i>Total</i>		<i>1374 acres</i>	

5-10 Area Allocation for Different Activities in the Town

(Source: Map of Model Town Lahore, 1937)

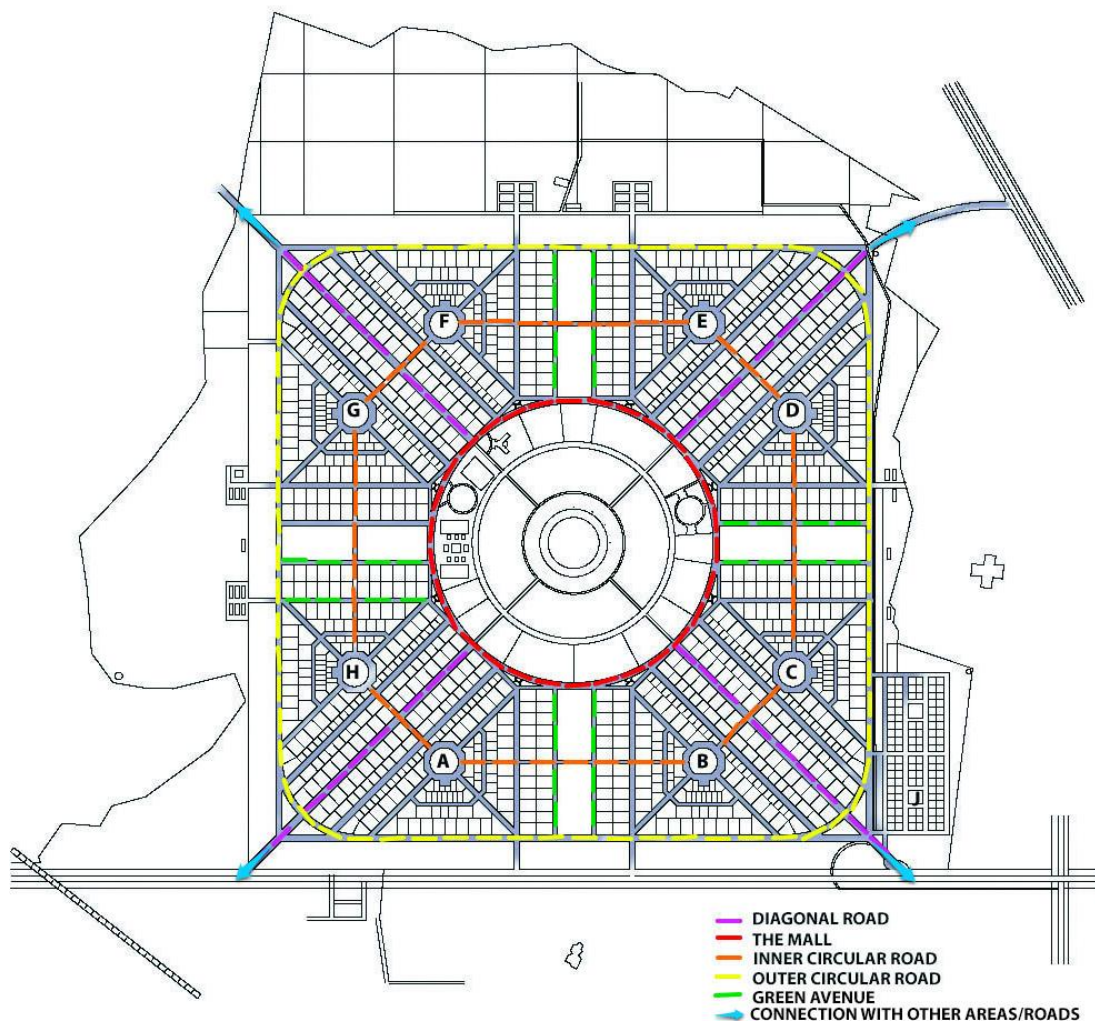


5-11 A Comparison of Areas allocated for different types of activities within the Town.

(Source: Map of Model Town Lahore, 1937)

Road Network

The main roads in the Town are of five types; (1) The Mall, (2) Inner Circular Road (3) Outer circular road (4) The Diagonal Roads and (5) The Garden Avenues. These roads segregate the residential blocks from the commercial and public hub and provide connection between the inner and the outer segments of the Town.



Drawn By: Shama Anbrine

Map of Model Town 1937.

2013.

5-12 The Road Network

Sr. No.	Road Name	Width (feet)	Length (miles)
1.	The Mall	70	2
2.	Outer circular road	75	5.33
3.	Inner circular road	75	3.5
4.	Diagonal roads	90	0.6
5.	Garden Avenue	60	0.33

5-13 Road Lengths and Widths

(Source: Map of Model Town Lahore, 1937)

The Mall¹⁹ was (and still is) the central and most elegant road of the Town. It is 70 feet wide and 2 miles in length, **5-12**,

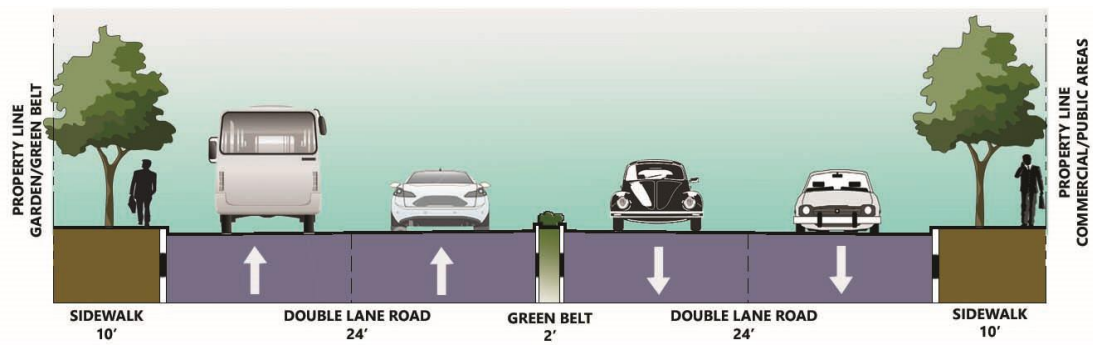
5-13. It has 10' wide sidewalks on both sides and two double-lane roads separated by a green belt, **5-14**.

The Outer Circular Road demarcates the boundary of the original eight blocks. It is 75 feet wide and 5.3 miles in length and was originally surrounded by a fruit garden, **5-12**,

5-13. A canal was proposed between the garden and the road running along the perimeter of the Town, however only one of its branches actually materialized, **5-2**.

Between these two concentric roads lies the inner circular road which connects all the blocks by connecting the spaces allocated for the religious buildings. It is 75 feet wide and 3.5 miles in length. The Diagonal Roads and Garden Avenues demarcate the boundary between blocks. Each of the Diagonal Roads is 90 feet wide and 0.6 miles in length. These were named after the adjacent blocks; e.g. The diagonal road between Blocks B and C was called B/C Diagonal Road. These roads connected the centre of the Town (The Mall) to the periphery of the town, **5-12**.

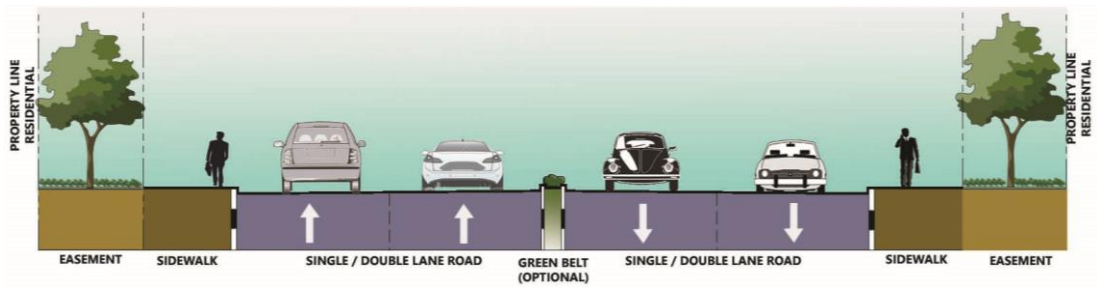
¹⁹ The term 'The Mall' was used for the central and most elegant road in the British extensions of the colonial city. All major colonial cities and cantonments in India boast 'The Mall' which has now corrupted as Mall Road. The main purpose of these wide roads was controlling public navigation however aesthetics became a major factor in their interpretation. See Home, R. (1998). *Of Planting and Planning*. p. 63.



Drawn by: Shama Anbrine

2013.

5-14 Section of The Mall Model Town Lahore.



Drawn by: Shama Anbrine

2013.

5-15 Typical Section of the Roads and Streets in the Model Town Lahore

As these roads were at a tangent to the Mall, green belts were used to provide proper transition between the roads. These The Garden Avenues are 60 feet wide and face a vast garden on one side. All these roads were designed to cater for a 10 feet wide green belt on the periphery. Between the green belt and the road was planned a pedestrian path 11 feet wide. In many places, it has still not materialized which has led to a 21 feet wide green belt on the periphery of these roads, **5-15**.

A green belt with trees in the centre of the road was present in the case of F/G diagonal road only. All the other central green belts were constructed post-1990. The circular mall culminated in an outer octagonal road. The green area

between these two was reserved for the bus stops. This road segregated the residential areas from The Mall, **5-17**. Details about the roads within each block are discussed in the next segment.

Residential Blocks

Each residential block was designed with roads emerging from the circumscribed octagonal road of The Mall. These roads were called Avenues. Avenue I and II are parallel to the Diagonal Road, Avenue IV and half of Avenue III are parallel to the Garden Avenue, the other half being parallel to the Outer Circular Road, **5-17**.

Sr. No.	Street Name	Width (feet)	Length (miles)
1.	Avenue 1	50	0.6
2.	Avenue 2	45	0.5
3.	Avenue 3	40	0.5
4.	Avenue 4	50	0.33

5-16 Street Lengths and Widths

(Source: Map of Model Town Lahore, 1937)

Avenues I, II and IV are 60 feet wide whereas Avenue III is 45 feet wide. All these roads were designed similar to the main roads with tree-lined green belts and pedestrian paths. However, the pedestrian paths did not materialize in most of the instances. The resultant areas for residential buildings are linear and the plot sub-division is rectangular except for the corner plots, **5-18**.

There are three types of residential plot sizes, A B and C Classes respectively in the descending order by size; 'A' class covered a plot area of 6 Kanals (0.75 acre), 'B' Class 4 Kanals (0.5 acre) and 'C' Class 2 Kanals (0.25 acre). In the accepted plan the proposal was to provide 1344 bungalows, 664 'A' class, 360 'B' class and 320 'C' class²⁰. In the final plan however, this number was reduced to 1264, with 158 plots in each block with 83 'A' Class, 39 'B' class and 36 'C' Class, **5-18**.

²⁰ Associated Press. (1923). Lahore's Model Town, Main features of lay-out plan, Scheme approved by Government. *Civil and Military Gazette* [Lahore]. 19 May. p.10.



Drawn By: Shama Anbrine

Plan of Model Town 1937.

2013.

5-17 Major and Minor Roads within a Residential Block



Drawn by: Shama Anbrine

Plan of Model Town 1937.

2013.

5-18 Types of Buildings within a Residential Block

However, the C Class plots were high in demand hence another block named J was designed comprising only of 104 'C' Class plots²¹. In the original eight blocks the plots were so arranged that rich and poor relations and friends could, if desired, live as neighbours²².

In terms of site designs, the plots can be divided into two categories. The standard plots and the corner plots. The standard plots are rectangle in shape and their front side (one of the shorter sides of the rectangle) faces the main road. On the other three sides there are residential plots. They have standardized dimensions. Hence on the plan a typical A Class plot measures 139' x 194', B Class plot measures 120' x 150' and C Class measures 90' x 105'. These rectangles were not based on a similar proportion; e.g. for the A Class plots the ratio between the sides was nearly 7:10, however, it increased to 4:5 and 6:7 for B and C class plots respectively. This was perhaps undertaken to balance the road facing side of a plot by providing a comparatively larger front side to the smaller plots. There are a few plots in C Class which measure 75' x 125'. In this case the ratio of their sides is reduced to 3:5. In order to compensate this backlog, their area is greater than the previously mentioned C Class plots.

The corner plots are usually larger than the standard plots. As evident from the name, they are located at the road junction and accordingly vary in shape in line with the road layout. When the roads intersect at right-angles, these plots are nearly rectangular with a curved or chamfered edge at the road junction. In case of acute angled roads, their shapes become triangular or pentagonal or a complex shape depending on the available site. (The house sites and plans are discussed in detail in the next Chapter)

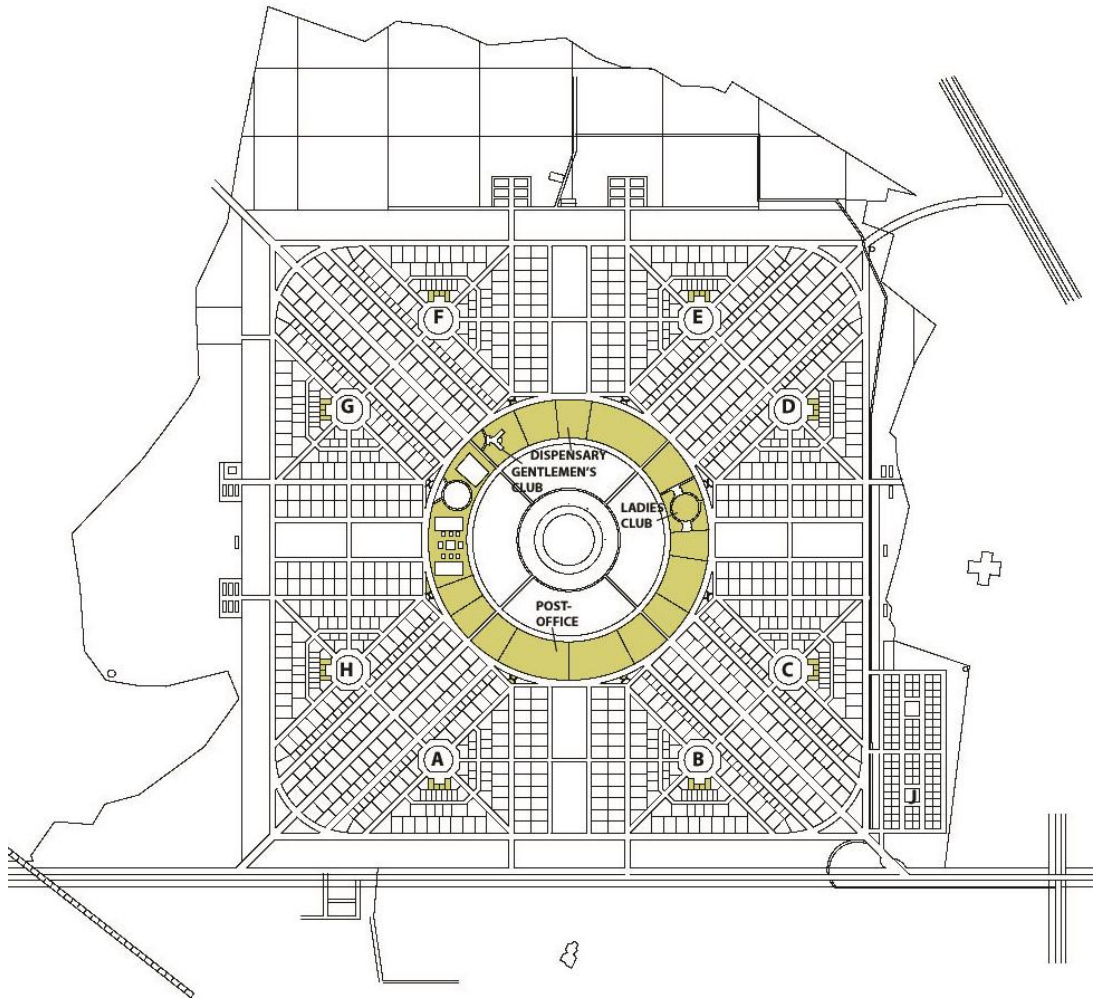
The eight squares are provided on the Inner Circular Road running through the middle of the residential area. In each square a place of worship was proposed which was proposed to be surrounded by lawns. At the sides of the squares three groups of four shops were to be provided to supply the daily

²¹ Chand, D.K. (1930). *The Scheme for a Model Town and its Realization* as cited in Vandal P. And Vandal S. (2006). *The Raj, Lahore and Bhai Ram Singh*. Lahore: National College of the Arts. pp. 81-94.

²² Ibid.

necessaries of life to persons living round each square, **5-18**. The places of worship were located in such a way that these were easily visible from a distance. Until 1947 only three religious buildings, a mandir (D-Block), a gurudwara (B-Block) and a masjid (A-Block) actually materialized (Details of these buildings are discussed in Chapter 7).

Commercial and Public Buildings



Drawn By: Shama Anbrine

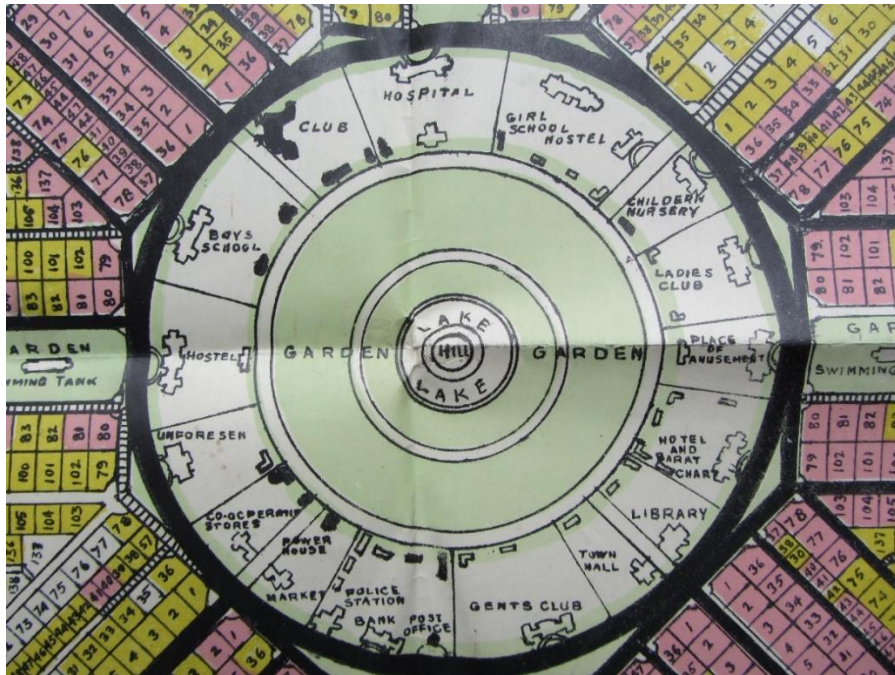
Map of Model Town 1937.

2013.

5-19 The Commercial and Public Hub

A vast area in the centre of the town was reserved for public and commercial buildings. Public buildings and places of common utility and convenience; i.e. a town hall, co-operative stores and a market, a post and telegraph office, a bank, a hospital, a library, boys and girls school, a children nursery, a ladies

club, two clubs for gentlemen, places of amusement, a hotel and a *baratghar* [a house for marriage parties] were arranged around a circular garden, **5-19**, **5-20**. While **5-20** shows a very detailed description of the facilities to be provided, until 1947 only the Gentlemen's Club, Ladies Club, Post Office and a Dispensary were constructed, **5-19**.



Drawn By: Unknown

Map of Model Town, 1937.

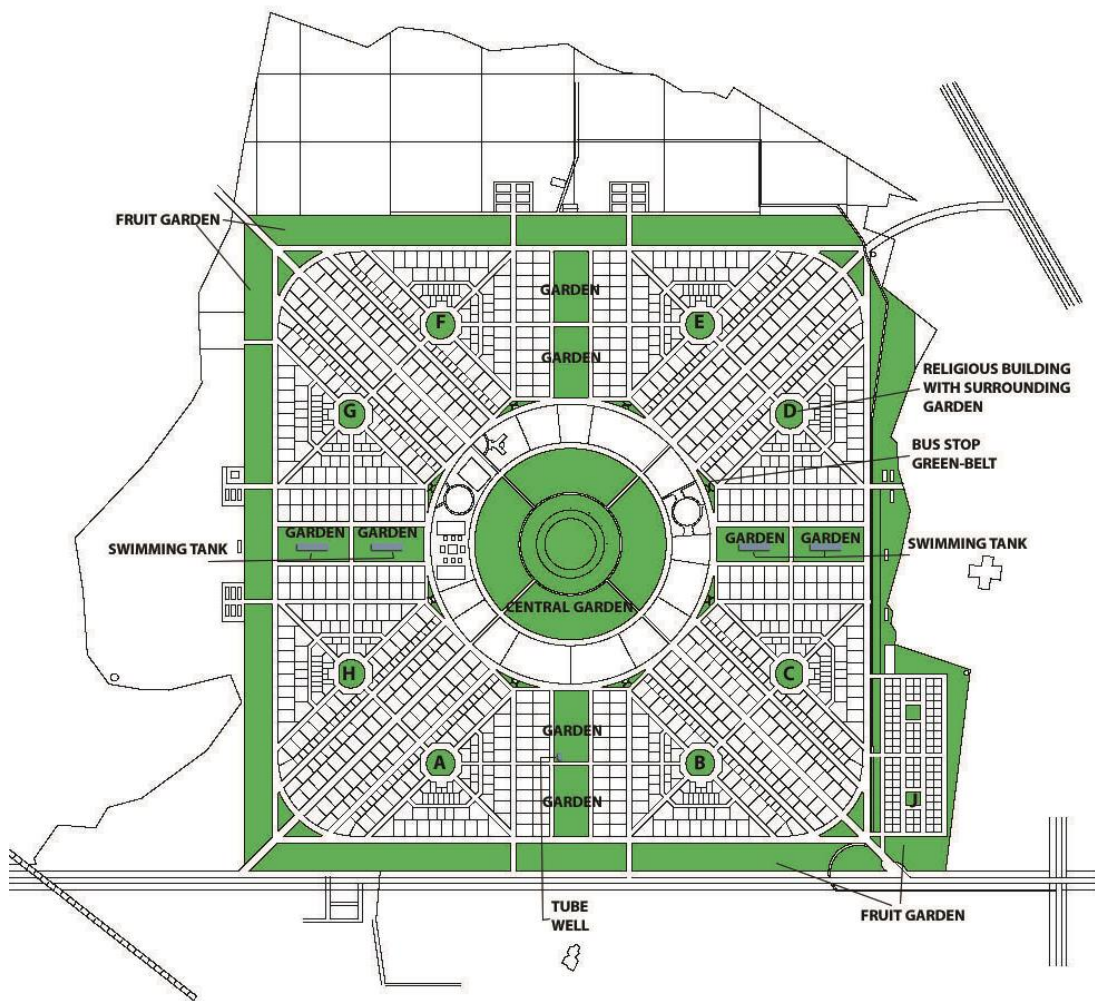
c. 1937.

5-20 The Central Core of the Model Town

(Details about these buildings will be discussed in the next Chapter).

Green Areas and Associated Activities

The town was planned with a variety of green areas within the residential area and the central core as well as around the Outer Circular Road, from every house having its own garden (discussed in detail in Chapter 8) and gardens surrounding the religious buildings to the roadside green belts, bus stop green belts and fruit gardens on the periphery of the town, **5-21**. However the largest green area were the public gardens. These include a circular garden in the centre of the Town and rectangular gardens adjacent to Garden Avenues, **5-21**.



Drawn By: Shama Anbrine

Map of Model Town 1937.

2013.

5-21 The Green Areas

The Central Garden as proposed was a combination of a variety of leisure activities found in the Indo-Pak subcontinent as well as other parts of the world. Its initial design comprised of the following²³:

²³ Associated Press. (1923). Lahore's Model Town, Main features of lay-out plan, Scheme approved by Government. *Civil and Military Gazette* [Lahore]. 19 May. p.10.

(1) A Central Hill with pathways, promenade and water reservoir

The central part of the garden was dedicated to a high hill, probably in an effort to create a symbolic hill station as evident from its description:

In the centre of the town there will be a hill 50 feet high. On the top of the hill will be located a reservoir for the supply of drinking water for the town. The water in the reservoir so placed will remain comparatively cool. The hill will be covered with evergreen plants and flowers. Paths will wind up to the top of the hill, where there will be a promenade round the reservoir with four pavilions providing shade and shelter. The promenade will be a delightful place on hot summer evenings where it will be possible to get a breath of cool fresh air. A few springs from the hill-side will feed the plants and provide water for a couple of pools containing gold fish²⁴.

Water was an important element in this hill, obviously because of its therapeutic properties in the hot climate of the area. Elaborate walkways and pavilions were proposed to enjoy the evergreen plants, flower and water bodies, again giving consideration to the weather conditions.

(2) A Cave Restaurant with impermeable structure

The most 'up-to-date' idea was the incorporation of an impermeable structure under the hill to accommodate a cave restaurants as seen from the description:

Inside the hill and under the reservoir there will be a few rooms, which would be turned into a cave restaurant, which will be well ventilated and well-lighted and, in order to keep them damp and vermin proof the rooms will be built of reinforced concrete or some such impermeable substance²⁵.

Cave restaurants were emerging in the US in the 1920 such as Wabasha Cave Street in St. Paul Minnesota and The Cave House in Tulsa Oklahoma. This, hence, provides another example how the planners of Model Town were trying to adapt innovative ideas from around the world in their ideal town.

(3) A Lake for fishing and boating

A lake was proposed which was described as:

²⁴ Ibid.

²⁵ Ibid.

Round the hill there will be a lake 100 feet wide and from 4 to 5 feet deep, holding enough water for fishing and boating, but not enough for a man to drown in²⁶.

(4) Lawns and flower garden

A garden was not complete without lawns and flowers hence it was proposed that:

Round the lake there will be lawns, which will be surrounded by a flower garden. The lawns and gardens will be watered from the canal through the lake by means of syphon tubes, which, drawing the water from the bottom, will keep the entire water in the lake in motion²⁷.

All these propositions were very ambitious and expensive to realize and, hence, were heavily criticised²⁸. The Society was unable to materialize these due to financial problems²⁹ and hence

The big circular area in the middle was common property and traversed only by footpaths. Only thorny shrubs grew there, but it was intended to become a public park.³⁰

Even today, the Central garden (now called the Model Town Park) merely comprises of pathways, some swings and a small canal in the centre, **5-22, 5-23, 5-24.**

(5) Places of worship

One noteworthy aspect about the planning of the Model Town was how its geometry was adaptation of its geometry to the religious conglomeration of its anticipated population. It can be seen from the early plans of the Town that the each residential block had a core green area reserved for a “place of worship”.

²⁶ Ibid.

²⁷ Ibid.

²⁸ Ibid.

²⁹ Rudduck G. (1961). *Towns and Villages of Pakistan: A Study*. Karachi: Government of Pakistan Planning Commission. p. 122.

³⁰ Tandon, P. (1968). *Punjabi Century 1857-1947*. p. 237.



Photograph by: Jawad Zakariya

Flickr

2009.

5-22 Aerial View of the Central Garden



Photograph by: Muddassir Bashir

Panoramio

2012.

5-23 A View of the Walkway in the Central Garden



Photograph by: Naveed Zafar

Flickr

2009.

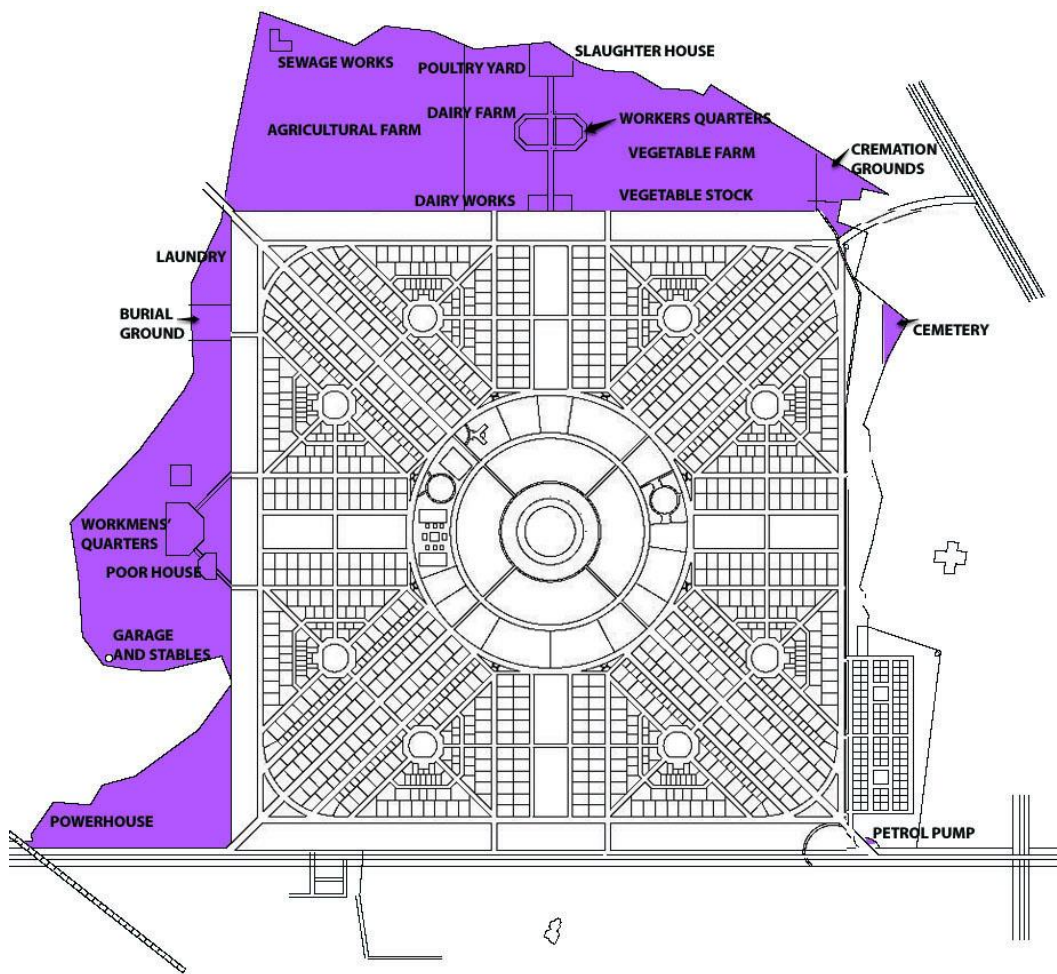
5-24 A View of the Lake in the Central Garden

The actual terminology, i.e. mosque, temple, church, gurdwara, did not appear on the maps until the town had started construction.³¹

Ancillary Services

Outside the main town, beyond the fruit gardens, numerous ancillary services were provided. Most of these services were concentrated along two sides of the square as per availability of site. In one cluster, all comestible facilities like vegetable farm and stock, dairy farm and stock, agricultural farm, poultry yard and slaughter house supplemented with a sewage farm were provided, **5-25**. Other facilities included places for conducting final rituals for the dead like a cremation ground, a cemetery and burial grounds, a laundry, a poor house, garage and stables, a powerhouse and a petrol-pump. Some workmen's quarters were also provided near the poor house and within the comestible cluster, **5-25**.

³¹ For details see 54. Khan, M. (1995). Cultural Transfers: The Repossession of Architectural Form. *Environmental Design: Journal of the Islamic Environmental Design Research Centre* 1-2. p. 92.



Drawn By: Shama Anbrine

2013

5-25 Ancillary Services in and around Model Town.

Analysing the Plan

For analysing the basic features of the plan, I have chosen two parameters. First, the rigid geometry on the morphology of the Model Town. Second, how Model Town compares to its contemporary urban developments in Lahore, in the British colonies in general and in the British Isles itself. The following discussion tries to elaborate on these aspects.

Geometry of the Plan: On Paper vs. Real Life

With the help of geometry, the final plan of the Model Town contained eight identical residential blocks, where each adjoining block was the mirror image of adjacent blocks. On the paper the plan exhibited a sense of complete equality for each residential block within the Town. They were designed similarly, offered similar facilities and were equidistant from the centre of the town. One of the advantages it offered was that if one knows the plot number and street configuration of one block, it becomes easy to navigate in other blocks without any problem.

In real life, however, things were quite different. Two important factors that determined the development of the area were the external and internal dynamics of the site. From the plan of Model Town 1937, 5-1, it can be seen that Block B and C have the largest number of completed and under-construction residences as compared to other parts of the Town. It was because they were closest to the main road connecting to the city of Lahore. Most of the people especially the ones who were living on the diagonal road in this area were traders who had to commute daily to the city³². The completed buildings in these blocks were the ones in favourable locations like along the diagonal road, the Mall and the Garden Avenue. The next set of completed residences was along the diagonal road between blocks F and G. This road was close to the Club building which also acted as the Town Hall or earlier a Dak Bungalow³³. This road was flanked by beautiful tall trees³⁴. 'As it was also

³² Tandon, P. (1968). *Punjabi Century 1857-1947*. p. 236-243.

³³ Ibid.

³⁴ Ibid.

farthest away from the main market and the road to Lahore, the areas on both sides of this road became the exclusive part of the town.³⁵

The pure geometrical form, however, did not offer any margin for future expansion. This can be seen both as an advantage and a disadvantage. As seen from the plan, 5-1, when another block was to be added due to shortage of smaller houses, it could not conform to the original design of the town. The only way it was made attractive to prospective residents was by placing it close to the main road connecting to Lahore. Later many residential blocks were added in post 1960's era in the areas reserved for ancillary services. Although these were called Model Town Extension, they were not part of the Model Town administratively. Hence the Town has managed to maintain its individuality amongst urban developments of various types just by limiting its area to the blocks A to J.

Without the margin of expansion, the town resulted in a change in morphology due to subdivisions of residential plots, mainly when the plots were inherited by a number of children after a deceased member. This resulted in an unregulated plot subdivision until 2001 when the society put a limit on the practice by limiting the minimum plot subdivision as 1 kanal ($1/8^{\text{th}}$ of an acre or 0.125 acres).

But regardless of these problems, Model Town was and still is one of the best planned urban developments of Lahore. It is indeed a very good example to understand how colonial town planning was influencing the thought process of educated and affluent Punjabis in improving their living conditions.

Model Town and Contemporary Urban developments

Model Town compares to contemporary British urban expansions found in most colonial city in many ways. With a planned layout in contrast to the traditional dispersed organically grown settlements, it follows a geometric pattern with wide streets and rectangular plot sizes instead of meandering streets and irregular plot sizes of the city proper. Likewise it exhibits spaces reserved for public purposes and a vast green belt on the periphery

³⁵ Ibid.

demarcating its extents and separating it from the surrounding areas³⁶. In some instances, it even contradicts the parameters of colonial towns. e.g., the Town uses the alphabetical sequence for identifying residential blocks and numerical sequence for naming the roads similar to the British developments. But unlike the British developments where similar plot sizes are grouped together and a clear segregation exists between smaller and larger plots (owing to the fact that they were allotted on the basis of rank or designation and facilities were also provided accordingly), the Town placed smaller and larger plots nearby within a block so that friends and relatives could live close to each other³⁷. This highlights a basic difference between the intended uses of the Town. The Colonial residential developments in the area; Cantonment, GOR, Mayo gardens in case of Lahore; were intended to provide housing accommodation to the civilian and military employees of the Government. The employees would spend a certain time in one or more residences during their employment tenure and then after retirement go back to the UK or retire to their home villages. One of the major reasons for planning Model Town was the Government officers who were not willing to go back to their native villages after retirement. Instead, they were seeking a comparable residential area to the government housing where they had spent some four decades of their lives³⁸. Hence the town was planned as a permanent abode rather than temporary lodge and was more focussed on the social interaction between friends and relatives instead of co-workers of similar designation and status.

Model Town was not the first British-inspired experiment of indigenous urban developments in Lahore. Previously, planned housing had been developed at Krishen Nagar, an area inhabited by wealthy Hindu merchants.

³⁶ The factors considered for comparison are taken from The Components of the (colonial town planning) Model by Robert Home. See Home, R. (1998). *Of Planting and Planning*. p.10.

³⁷ Chand, D.K. (1922). *The Model Town*. Part I. Lahore: Central Press. p.12.

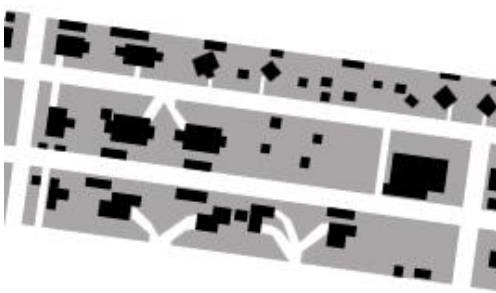
³⁸ Tandon, P. (1968). *Punjabi Century 1857-1947*. 236.



I. Cantonment



II. GOR-1



III. Mayo Gardens



IV. Model Town



V. Krishan Nagar

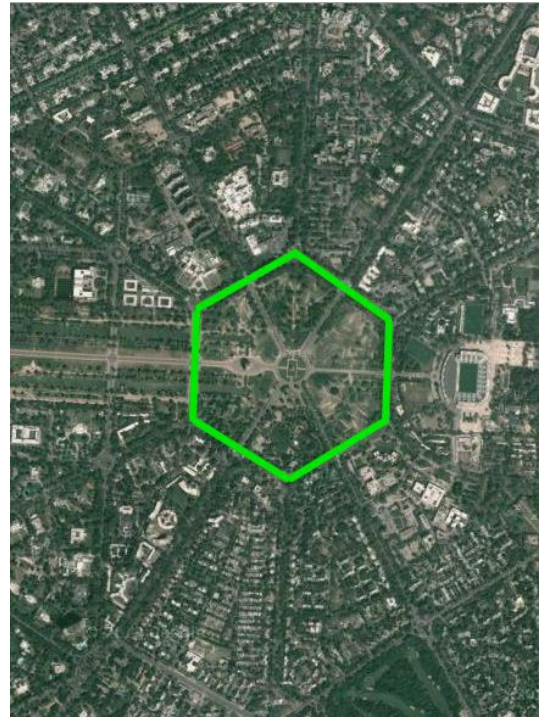


VI. Walled City

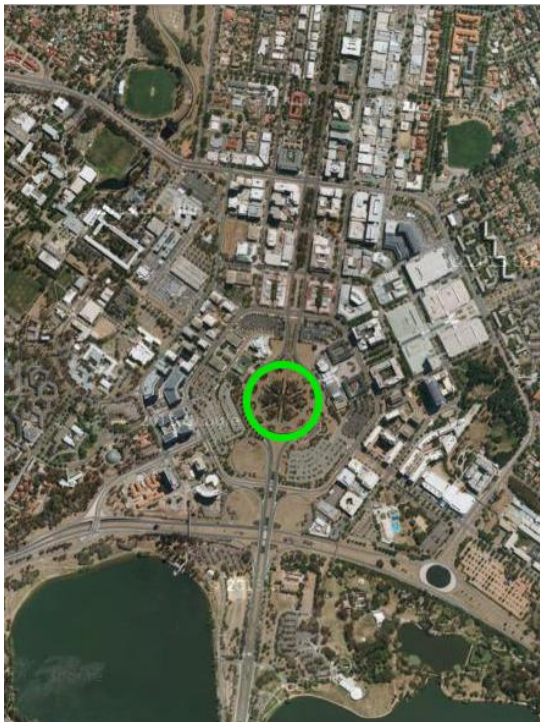
5-26 Urban Fabric of Lahore 1931



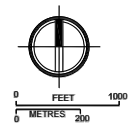
I. Model Town Lahore



II. New Delhi



III. Canberra



Drawn By: Shama Anbrine

Google Maps

2013.

5-27 Comparison of Central Gardens

The Central Garden of Model Town is one of the largest in any Garden City, almost equal in size to that of New Delhi. Unlike New Delhi, it is a single garden and has not been divided into smaller specialist gardens hence spatially it appears to be much bigger than it.

While there were no lawns and the houses were planned in the walled city type (discussed in next Chapter), the wider roads and a grid iron plan distinguish it from the meandering narrow roads of the Walled city, **5-26**. However, indigenous town planning in colonial cities has not received much appreciation beyond the notions of acculturation or colonization of culture although there are significant evidences of the idea of adaptation rather than adoption.

The Central Garden of the town, in size and in proposed design, was and still is one of the largest in any garden city. It is almost equal to the one in New Delhi which was designed as a capital of British India and almost five times the size of Canberra, the capital of Australia, **5-27**. The proposed hill station idea resonated with Tata's vision of a local hill station at Dalma³⁹ in Jamshedpur however it was quite impractical considering the flat topography of Model Town site in comparison to the contoured site of Dalma.

The most celebrated and distinguish feature of this Town were the large areas reserved for public amenities, leisure and ancillary facilities. This was a quasi-essential part of the garden city movement as well as the modernist movement and a crucial part of garden cities like Letchworth and Port Sunlight. Yet, it was not a common characteristic even in the British civilian residential areas in India. In this context Model Town developers have apparently received great inspirations from nearby cantonment where extensive leisure facilities were present⁴⁰ as well as Jamshedpur where Tata Steel had provisions of facilities like concert hall, billiard hall, and reading rooms, tennis court, cricket and football ground and a bowling alley as well as a hotel, town hall and a bank⁴¹.

Hence the town was conceived and designed as the most comprehensive garden suburb trying to adapt to modernism and in the process incorporating all the major innovations and facilities present at that time. Before discussing the architectural character of the town, the next chapter tries to give an insight into the early members and residents of the town and their lives.

³⁹ Lovat, F. (1919). Iron and Steel in India; A Chapter in the Life of Jamshedji N. Tata. Bombay: The Times Press. p. 92.

⁴⁰ Discussed earlier in Chapter 1, p. 12.

⁴¹ Op. cit. p. 93.

Social Character



6-1 Some Famous Early Residents of the Model Town.

Top Right: The Hon'able Mr. Justice Abdul Qadir K.B. (Punjab Assembly Lahore)

Bottom Right: Sir Ganga Ram. (Sir Ganga Ram Trust Lahore)

Left: Baba Pyare Lal Bedi and Freda Bedi (Ranga Bedi Collections)

CONTENTS

The Cosmopolitan Social Geometry of the Town

Social Character of the Town

And then came the 'Independence'

The idea of a Model Town targeted the desire of an emerging Indian middle class to achieve happier healthier and better lives. In this context this chapter looks into the lives of these earlier members and residents of the Model town with reference to their cosmopolitan nature and their individual ethnic, religious, and professional backgrounds. By doing this, the aim is to give an insight into the social character of the Town and the transformations that occurred due to the independence of the Indian subcontinent.

The Cosmopolitan Social Geometry of the Town

The idea of the Model town was floated in the end of 1919 and within three years the Society had attracted prospective membership from a fairly large number of people. By the end of 1922, the total number of its members was 439.¹ Khem Chand proudly mentioned this fact in his circular dated 1922 as:

It is very encouraging to note that in spite of the fact that the Society has made no special efforts whatsoever to get Members, it has given no advertisements, has kept no canvassers and has paid no commission or brokerage on the sales of shares, as many as 439 persons have already become Members in accordance with the bye-laws of the Society.²

A list of these members was attached as a separate chapter (Chapter VI) in his book *The Model Town* (1922) in order to exhibit 'the *cosmopolitan* nature of the first owners of houses in the Model Town'³. In his opinion, this in itself was sufficient to guarantee the success of the town.⁴

The cosmopolitan population of the Model Town Lahore presents an interesting scenario within the context of indigenous living in the realm of Indian subcontinent where complicated segregations have historically existed and are widely accepted due to a heterogeneous population discriminating amongst each other on the basis of religion, caste or profession. It was strange that many European residents of the city assumed this development to be a

¹ Chand, D.K. (1922). *The Model Town*. Part I. Lahore: Punjab Central Press. p. i.

² Chand, D.K. (1922). *The Model Town*. Part I. p. ii.

³ Chand, D.K. (1922). *The Model Town*. Part I. p. iii. This list has been attached as Annexure 2.

⁴ Ibid.

Government initiative rather than the changes occurring in the Indian society due to foreign influences. Esmee Mascall, a short story writer who lived in Lahore during the time of establishment of this town wrote:

One can't imagine anything but furious resentment had the British authorities razed to the ground the ancient piled-up houses in that rabbit warren of narrow streets, and re-housed the City population in something so alien to their way of life as a neat Western-type 'New Town' environment. Such an "alien" change in environment might destroy the inner substance of Indian culture... Wouldn't the ancient Indian crafts have died out divorced from the crowded Indian way of life?⁵

The situation was otherwise, however, as the residents had chosen to live there on their own initiative, hence early life in the Model town gives an interesting insight into the lives of people willing to live in the new town.

Key Requirements for Membership

According to the by-laws of the CMTS, any person over the age of 18 years was allowed to become a member upon depositing Rs.100.⁶ They were allowed to buy only one plot per member⁷ and were required to abide by the rules and regulations of the CMTS. One important legislation in this context was the Rule 32 which forbade them from selling their house to another member of the CMTS and restricted any immoral activity in the Town⁸. As the Town was built upon principles of co-operative movement, one of its major objective was provision of affordable housing for the middle classes⁹. Accordingly the land prices were subsidised¹⁰. In this context, Rule 32 was perhaps implemented to ensure that the members of the Society were genuine house owners and not private real estate agents or land developers looking for loopholes in order to undertake land speculation.

⁵ Mascall, E. (1971). *All Change*. National Archives.

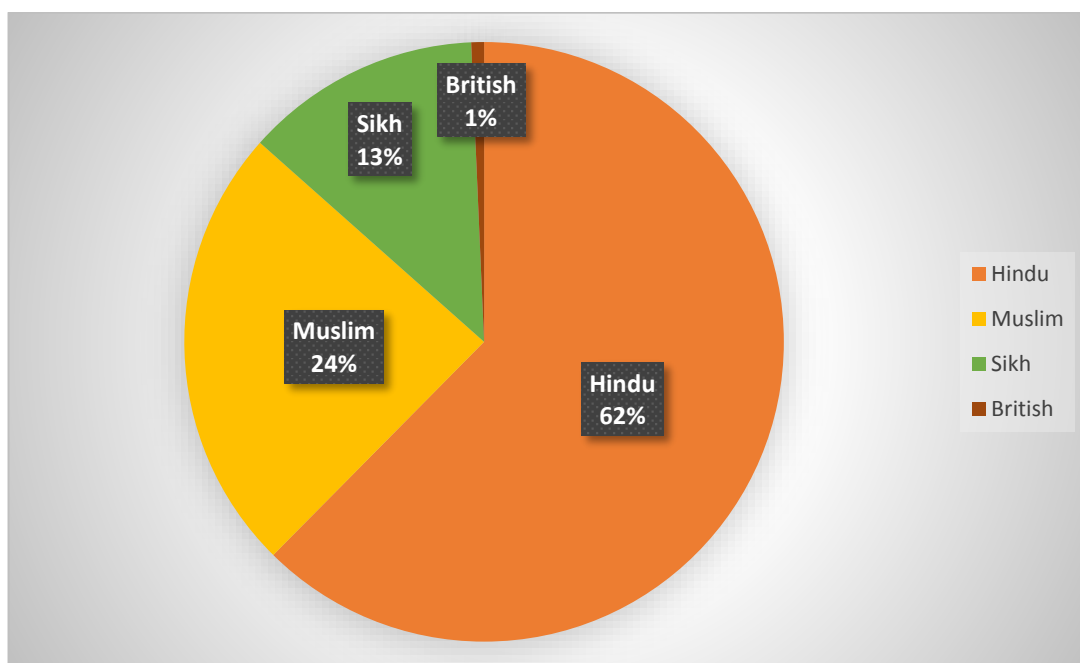
⁶ Chand, D.K. (1922). *The Model Town*. Part I. p. 43.

⁷ Ibid.

⁸ Ibid.

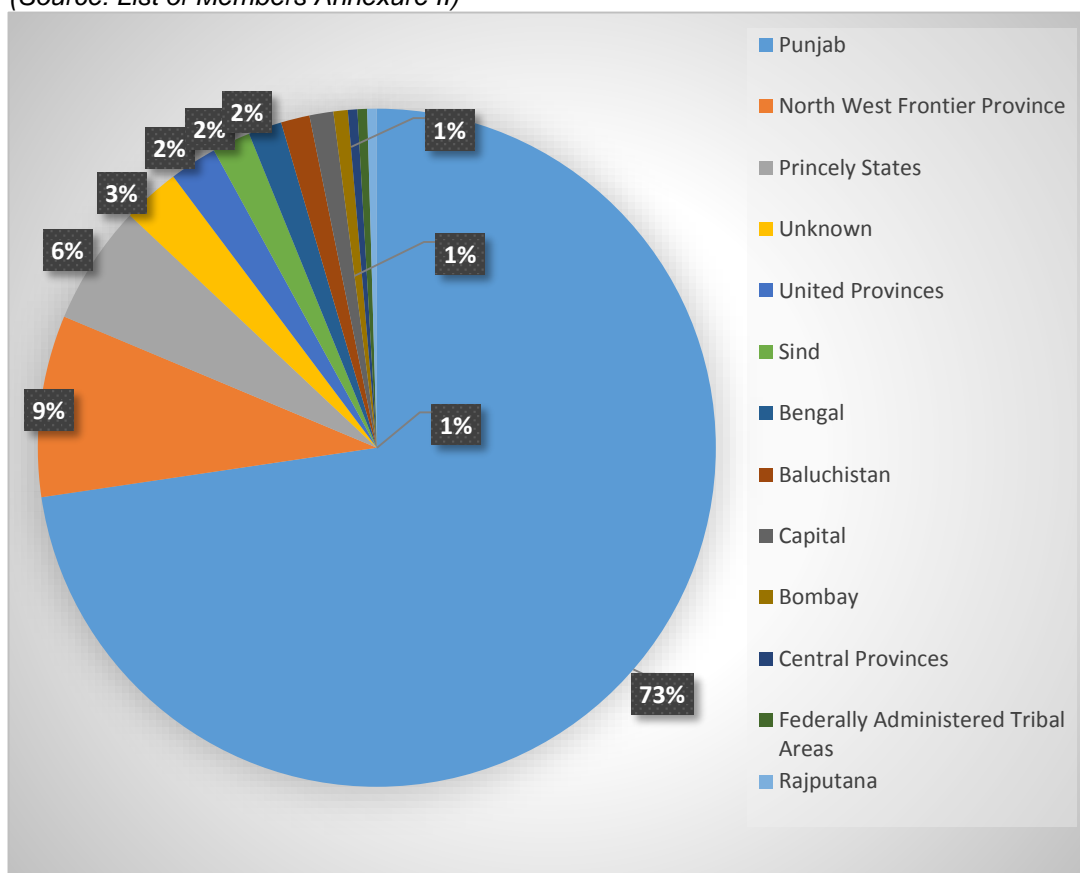
⁹ Discussed earlier in Chapter 1.

¹⁰ Discussed earlier in Chapter 4.



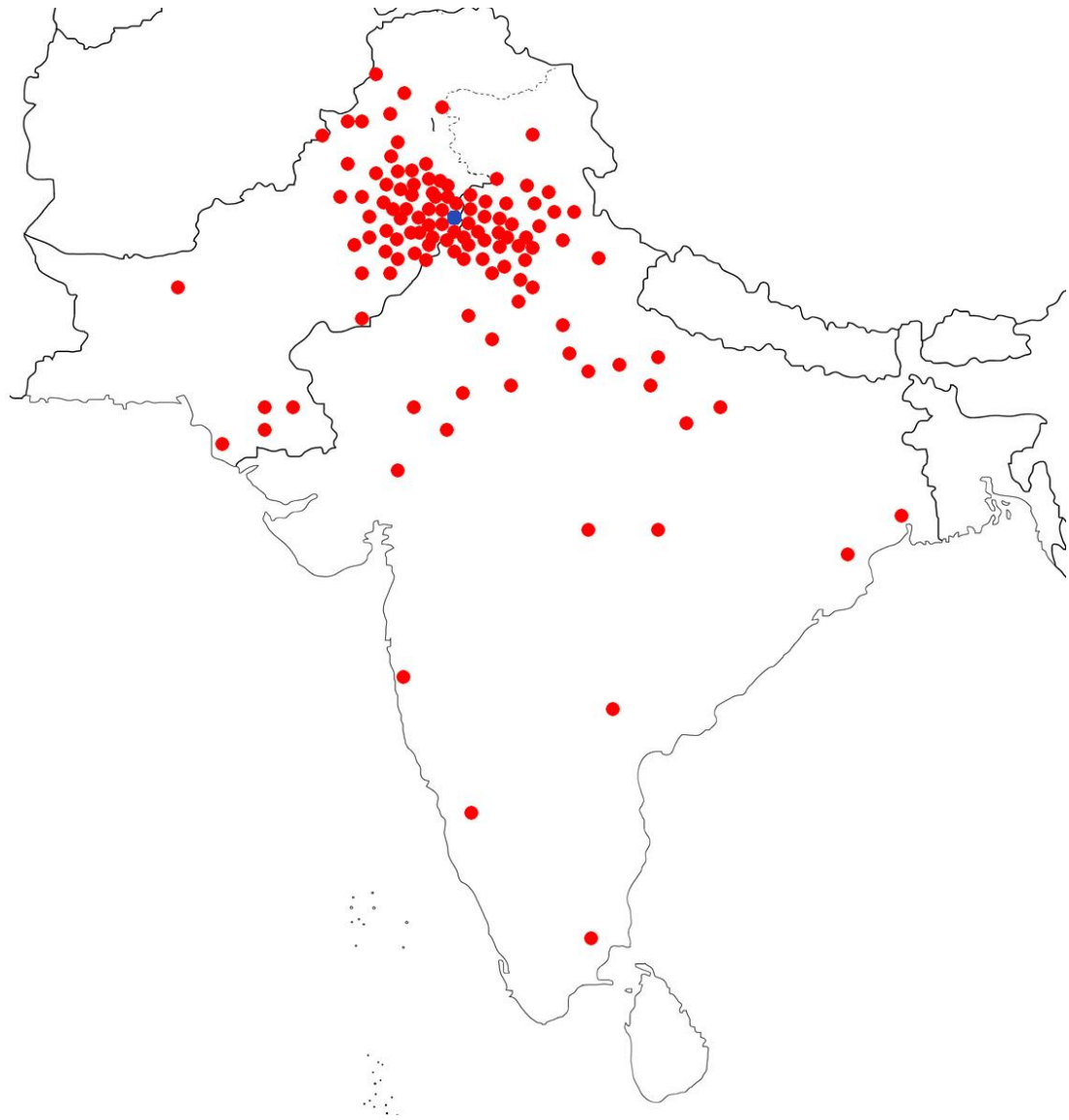
6-2 Religious Composition of the Model Town

(Source: List of Members Annexure II)



6-3 Proportion of Members from different areas of British India

(Source: List of Members Annexure II)



Drawn by: Shama Anbrine

Source: List of Members Annexure II

2013.

6–4 Map of India highlighting the locations from where members of Model Town came from.

With Lahore as the epicentre (marked in Blue) the members came from all major parts of British India.

Religious and Ethnic Demographics of the Model Town

The members of the Model Town belonged to all the major religions and provinces of India. Out of the 439 members, 273 were Hindus, 107 Muslims and 56 Sikhs thus representing all the major religions in the region. In addition three members of British origin were also willing to live in the Town, **6–2**. These members came from all over the Indian sub-continent, **6–3**, **6–4**. The majority was of Punjabi origin (316), however, there were members from NWFP (38), United Provinces (10), Sind (8), Bengal (7), Baluchistan (6), Capital (5), Bombay (3), Central Provinces (2), FATA (2) and Rajputana (2). 28 members were from various Princely States including Chamba, Cuttuck, Dalhousie, Dharamsala, Dhera Dhun, Ganagapur, Hyderabad Deccan, Idar State, Jammu and Kashmir, Kulu, Patiala, Nowgang, Ootacammund, Palampur and Simla.

This ethnic composition raises a basic question too; why people from all over India wanted to live in Lahore? It can be understandable for Punjabis from smaller cities to opt for living in Lahore due to better educational institutions, health facilities and employment prospects. However, a person from another part, for example Bengal or Hyderabad, would struggle to live there due to completely different climatic conditions, social character, cultural norms and culinary tastes. One possible explanation for this can be found in the mode of advertisement used to float the idea of this Town. The idea was not advertised using print media. Instead it spread through networking¹¹ and its major target were the government employees who were posted in a different city every two years. Thus, the address that accompanied their applications might have been their residential address at that particular time but not their permanent address as on their domicile. Therefore while it can be stated that Khem Chand received applications for his proposed town from throughout India, it does not lead to the conclusion that the proposed population was also cosmopolitan in nature.

¹¹ Discussed earlier in Chapter 4.



6–5 Some Eminent Members of the Model Town

Top left: Raja Sir Daya Kishen Kaul (Abhinav Sopory)

Bottom Left: Diwan Tek Chand (Vijay Sabharwal)

Right: Sir Shadi Lal (Walter Stoneman)

Gender-based Composition of Members

Nearly 97 percent of these members were males which highlight the non-existence of financially independent females in a traditional male dominated Indian society. There were only 11 female members, out of which one was a hostel superintendent, Ms. M. Bose, a civil surgeon, Mrs. A.B. Asghar Ali and a British lady, Mrs. G.L. Philips. The rest of the women were housewives as evident from their surnames and serial number which followed right after their husband's name.¹² Most likely they were members because their husbands desired more than one plot and since the by-laws prohibited more than one plot, they bought the second plot in their spouse's name.

Professional Composition of Members

Professionally the member can be categorized in three broad classes; government servants, businessmen and military personnel. More than half (232) of the members were government employees, either working (222) or retired (10), in various capacities across the 22 grades. The highest ranks included Raja Sir Daya Kishen Kaul, the Chief Minister of Patiala State, **6-5**, Diwan Tek Chand Commissioner of Ambala district, **6-5**, Sir Shadi Lal Chief Justice, **6-5**, and Justice Abdul Qadir K.B., **6-1**, of the Lahore High Court.

On the other extreme end were the lowest ranks including some sub-head clerks, camp head clerks and head clerks from departments like Auditor General's Office, Construction and Works Department, Deputy Commissioner's office, Civil Surgeon's Office, Public Works Department and Superintendent Engineer's Offices. Later, however, majority of these clerks did not take up membership of the Town as the government had planned separate housing scheme for them¹³.

A wide range of professionals in different government ranks including doctors, engineers, civil servants, school and college teachers, university professors, and various cadres of judges formed a significant part of the members. Amongst others, there were 52 lawyers, in various capacities including *vakils*,

¹² See Appendix II, Nos. 6-7, 35-6, 73-4, 93-4, 124-5, 168-9, 290-1, 415-6.

¹³ Chand, D.K. (1922). *The Model Town*. Part I. p. 43.

pleaders, public prosecutors, and private practicing lawyers and 7 bankers, including a managing director and a secretary as well as 2 agents and 3 managers.

There were some 50 businessmen, including a bank proprietor, a broker, a victuallizing agent, an insurance company agent, several mill owners and businessmen, dairy farm owners, and colliery owners, contractors, wholesale merchants from walled city bazaars and timber merchants. While many of them might have chosen to live in the area due to its facilities and sanitation, the fact that being part of the society might give them some business as suppliers of materials and services for construction and co-operative stores cannot be ignored. Interest from 9 timber merchants as members of the housing society which was to be constructed after deforestation is also noteworthy.

There were also some (27) military officers of various cadres, military civilian officers and military doctors. Among them were high profile officers like senior British army officer Lt-Col. (later Sir) John Walter Ottley¹⁴ and Izzatnishan Maj. Malik Nawab Khuda Bakhsh Khan Tiwana and Lt. Col. Ganpat Rai followed by a number of commissioned officers in various cadres. There were 8 army doctors, including civil surgeons, Maj. Abdul Rahman Lauddie, Maj. N. S. Sodhi and Capt. Rattan C. Watts. Military personnel have had the best experience in colonial India and in all major cities, the cantonments cover the largest residential areas as compared to other departments.¹⁵ Hence it was no surprise that many military men chose to live in this exclusive enclave.

From this list of members, the cosmopolitan nature of the prospective residents of the Town is quite evident. Majority of these members came from government and military services background which is no surprise as they had had experienced life in government housing (discussed earlier in Chapter 3 and 4). Therefore they were more attracted to the idea of the Model Town. At

¹⁴ Walford, E. (1919). *The county families of the United Kingdom; or, Royal manual of the titled and untitled aristocracy of England, Wales, Scotland, and Ireland*. Vol.59:276. and Unknown Author. (1931). Obituary Sir John Ottley. *The Sydney Morning Herald*. 6 Feb. p. 5.

¹⁵ Discussed earlier in Chapter 4.

the same time, the idea of the Model town as an elite area flourished due to these high profile members who were willing to live a western lifestyle.

Social Character of the Town

The Town was developed in the late 1920's and early 1930's and interestingly many of the famous later residents were not the earlier members. Life in Model town has been described by many early residents in their autobiographies. The discussion below is an interpretation from selective experiences from these autobiographical texts.

Eminent Residents of the Town

Prominent residents of the Town included Princes Bamba Sutherland, 6-6, the last descendent of Maharaja Ranjeet Singh who lived in 104-A (and named her house *Gulzar* [an orchid]), Hafeez Jullundry, 6-6, the famous poet who wrote Pakistan's National anthem in 44-G, famous political activist Baba Pyare Lal Bedi and his European wife Freda, 6-1, President of Akali Dal Master Tara Singh, 6-6, and Sir Ganga Ram, 6-1, *the Father of Modern Lahore*.

A Town for Old Retired Men

Although the earlier members belonged to wide range of social, cultural and professional backgrounds, they were mostly retired government officials who

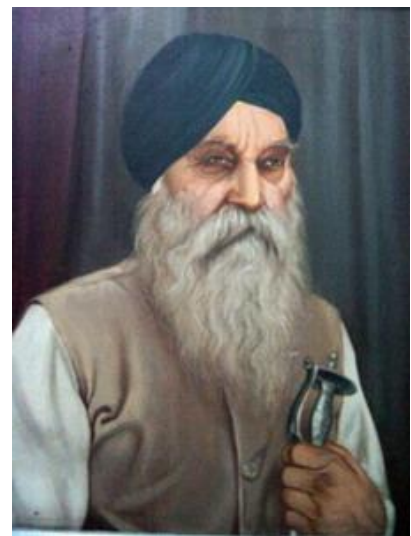
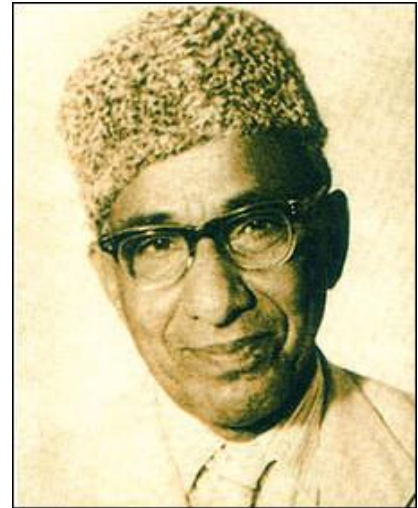
All addressed each other as Rai Sahib, Rai Bahadur, Khan Sahib or Khan Bahadur, Sardar Sahib or Sardar Bahadur. ...¹⁶

These men had spent a large part of their lives in the government services and therefore their lives were very structured and disciplined.

Regular and well-ordered as Model Town looked on the map, so were the lives its citizens lived.

After retirement, the main task in their lives was to build a home for themselves.

¹⁶ Tandon, P. (1968). *Punjabi Century 1857-1947*. London: Chatto and Windus. p. 236.



6-6 Some Eminent Residents of the Model Town

Top right: Hafeez Jullundhri

Bottom Right: Master Tara Singh

Left: Princess Bamba Sophia Jindaan Sutherland

The transition from active working life to a retired existence was made easier by the pleasant task of first having to build your own house. One after the other, old engineers, army doctors, retired civilians and session judges arrived on the spot and started laying their foundations.¹⁷

These retired government officials led a physically active life style. Their day started with an early morning walk.

All the old men began their day early. They believed in exercise, and on summer mornings at half past four the circular road was full of early risers doing their 'chukkar' [a complete round of the Mall). Then they were too busy to talk, their minds were purely on the exercise.¹⁸

And Prakash Tandon describes his father's routine as follows.

On cold winter mornings you heard father's alarm clock at six, and while you snuggled deeper into your quilt he was fairly running round the circle to keep himself warm. Surely the day was long enough and he had nothing much to fill it with, but it would have been against his principles to get up later. For rainy mornings he had measured up the back verandah to know exactly how many times he ought to walk it up and down.¹⁹

Just like the day started with a walk, it also ended with one.

The evening walks were livelier and reserved for talk. Father used to set out in the company of a neighbour and old friend who had been minister in Bikaner, and during the *chukkar* they often stopped to talk to other Rai Sahibs and Rai Bahadurs, generally enquiring about each other's health in great detail, recommending cures and comparing notes on the efficiency of their favourite medicines²⁰.

The time between these walks was spent in getting involved in the politics of the Model Town Society.

¹⁷ Hameed, A. (2008). Where Hindus and Sikhs once lived. *Lahore Lahore Aye* [Lahore is Lahore] translated by Khalid Hasan. Lahore: Vanguard Books.

¹⁸ Tandon, P. (1968). *Punjabi Century 1857-1947*. p. 238.

¹⁹ Ibid.

²⁰ Ibid.

Having spent their lives as officials, [the Model Town Residents] now all tried to run the Society office and its poor secretary, who usually never stayed in the job for long. The retired conservator of forests took him and the *malis* [gardeners] to task about the trees and road hedges; the engineers, depending upon the branch of Public Works Department (PWD) they had belonged to, forced their advice about the roads, buildings, canal water ditches and electricity; while the retired ICS just laid the law down about everything.²¹

People were happy even when their contributions in the working of the society were not extensive or elaborate.

When the time came for the annual elections to the various offices, there was hectic activity all round. Father was seen at home only at mealtimes, and spent his day running around canvassing. But he was too straightforward and devoid of all the traits that make a politician, ever to become an office bearer... he was very pleased to be asked to count the votes, and that was all his activity...²²

Being old did not mean that they were not capable of a good fight, especially when in a heated political debate.

...there were ink stains all over the walls (of the club). When members got heated in the debate, ink bottles flew in all directions.²³

When they were not involved in any of these tasks, they preferred gardening.

...the garden afforded continuous interest. ... The few flowers in the front garden looked after themselves, but the orchard included every variety of fruit that could possibly grow in the Punjab. That was in fact its weakness, for as the few of each kind bore fruit at different times, it was not worth guarding them, and apart from the oranges, the parrots had most of it. The vegetable garden was his main interest, and in season it produced more than enough for the need of the house, and father, like a good Punjabi, looked with pride at the size and whiteness of his cauliflowers.²⁴

²¹ Ibid.

²² Ibid.

²³ Tandon, P. (1968). *Punjabi Century 1857-1947*. p. 239.

²⁴ Ibid.

Youth and Age - The Generation Gap

Model Town was not just a place for old men.

Model Town was not only a city of the aged, for some old government servants, who had outlived their wives and married much younger women, kept on raising a family long after retirement. Sometimes it happened that there were three happy events in the family when mother, daughter and daughter-in-law were simultaneously delivered.²⁵

However, the older generation was not adaptable to new thoughts and ideas and as a result the younger generation could not make their mark on the life of the Town.

One of the subjects [of discussion during the evening walks] was of course the pleasure-loving younger generation, who-just imagine-wanted to have a cinema in Model Town. 'Not as long as we are alive. It would only make the servants lazy and take the children's minds off their studies.' Most of them had never seen a film. I overheard someone saying in 'I believe that now they talk all the time in the films.'...²⁶

The young ideas were certainly not welcome as they challenged the authority and discipline of the old men.

Once some young people ventured upon something drastically new; a mixed whist drive at the men's club. This did not meet with approval particularly as it ended as late as eleven at night.²⁷

The location of the town and the exclusivity it offered was comparable to colonial extensions as well as concepts of suburbs in the British Isles. Analogous to contemporary garden cities in the British Isles, the public facilities provided in Model Town were also dependent on the decisions of the Managing Committee. Thus the young people of the Town were unable to have a cinema sanctioned by the Managing Committee which mostly

²⁵ Ibid.

²⁶ Ibid.

²⁷ Ibid. p. 240.

comprised of retired officers due to their fears of corruption of minds²⁸ in a situation similar to Letchworth where a ban on selling alcohol in public premises was in-effect.

The young people despite these restrictions tried to avail every possible opportunity of enjoying the luxuries offered by the Town. Ahmad describes one such incident as:

‘The first time I ever drove a car was a convertible Austin in 1943, belonged to Flying Officer Noor Khan, known as 'Nuru', later he became the Commander-in-Chief of the PAF. The car was parked in the late Col. Nasrullah's house, his class mate from the RIMC Dehra Dun. The latter's father was a close friend of my father from Mussoorie U.P. As I entered the bungalow, I noticed that the key was still in the ignition hole and it was very tempting to have a free ride. I did not even know how to use the gears and clutch properly. I stalled a number of times before I managed to have *a complete round of Model Town, Lahore*. I am sure nobody heard the car leaving and re-entering the porch. Later, I innocently entered the house but felt guilty having driven somebody's car without his permission.’²⁹

Women of the Town

There is not much written about the women of the town, most likely, because majority of them were not active members within the official working of the society nor they have any written memoirs. There were two European ladies, however, whose experiences have been shared by other people.

Freda Bedi, Mr. B. P. L. Bedi's European wife was one popular lady. Both the husband and wife were dedicated Marxists to the extent that

...they integrated in the environment in which they were then living by constructing a glorified brick and mud hut for their residence in Model

²⁸ Ibid.

²⁹ Ahmad S.M. (2001). *A Lucky Pilot: Memoirs of Retired Wing Commander Lanky Ahmad*. Lahore: Ferozsons. p. 7.

Town, Lahore, without electricity or formal furniture and both dressed in khaddar.³⁰

Prakash Tandon has written about his wife Gärd's experiences of living in the town.³¹ According to him, Gärd actually knew Model Town life more than he did, as she used to spend some time there every year until partition.³² She accompanied his father to the Society Office during elections, and his morning walks at 4:30 am, *the only time she could enjoy some cool air*.³³ Her experience of life in the Town, though monotonous, were enjoyable as stated by Prakash Tandon.

Though every day was like the other, Gärd liked life in Model Town. Although she was never hurt by any social ostracism, Bombay irked her as a place dominated by Europeans, who hardly counted Indians as existing, and she felt happier in the completely Indian surroundings of Lahore. The small Swedish community totally ignored her. But from the moment she had unloaded her baggage, ever increasing as the children increased from one to two to three, on the tongas at the Lahore station, she felt at home. And when at last the cavalcade reached Model Town, people on the road welcomed her back.³⁴

His father always sent her to the functions, as she was conspicuous and thus everyone knew that she represented the family.³⁵ One thing that did bother her was the symmetry of the drawing room interior which she tried to change every night. But each morning the servant would restore it to previous settings and this continued till she eventually gave up.³⁶

To many old women, Model Town was a boring place away from the life of a bustling city. The sense of diaspora was at times too overwhelming for them.

³⁰ Taseer, C.B. (1986), *The Kashmir of Sheikh Muhammad Abdullah*, p. 24

³¹ Tandon, P. (1968). *The Model Town*. Part 1. p. 238.

³² Ibid.

³³ Ibid.

³⁴ Ibid.

³⁵ Ibid.

³⁶ Ibid.

But this suburban delight was not the Lahore with which my grandmother was acquainted. She called it a jungle, and returned to the walled city on any given pretext. The journey involved a bus ride, hopping tongas and walking along the ancient streets of surreal Old Lahore.³⁷

Gatherings

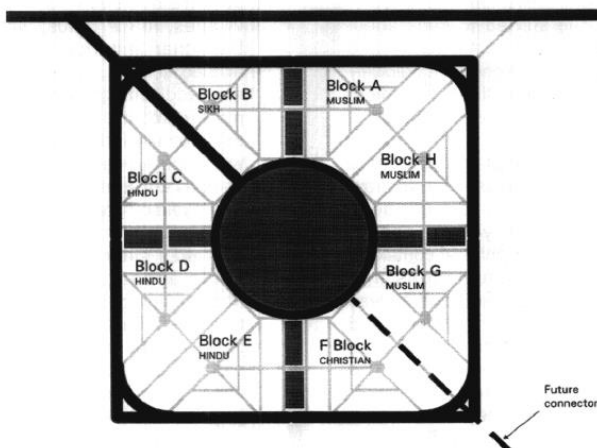
There was no concept of mixed social gatherings.

Though there was no purdah, except in some Muslim families, there was no real social mixing of the sexes. Even husbands and wives did not always go for walks together. She would walk with her own women friends in the evening. Even young people home on leave would often conform.³⁸

Religious Character

The religious distinction was not rigid as many other parts of British India.

When it was Eid, we were invited to Muslim homes. When it was Diwali, we were invited to the Hindu's homes, for Diwali, the Hindu festival of lights. When it was Christmas, they all came round to our place to taste my mother's Christmas cake...Later on, I found out that the multi-religious, multi-cultural, multi-lingual society of Panjab did not exist in other parts of North India³⁹.



However, the members were allowed to choose their neighbours and this resulted in distinct religious concentrations within certain blocks, **6-7**.⁴⁰

Drawn by: Masood Khan

6-7 The Inter-communal Mix Model Town Lahore

³⁷ Rumi, R. (2008). Living Lohawarana. *Himal Magazine*. Oct 2008.

³⁸ Op. cit. p. 241.

³⁹ 74. The National Archives. (2011). Reginald Story. *Panjab 1947: A heart divided*. Online Exhibition. [Accessed 2/12/2012]

<http://www.nationalarchives.gov.uk/panjab1947/reginald.htm>

⁴⁰ Khan, M. (1995). Cultural Transfers: The Repossession of Architectural Form. *Environmental Design: Journal of the Islamic Environmental Design Research Centre* 1-2, p. 89.

There were not many religious disputes and therefore any religious dispute in the town got significant coverage in the print media⁴¹.

PLATFORM HELD TO BE MOSQUE

Excitement in Lahore Model Town

FROM OUR OWN CORRESPONDENT.

LAHORE, October 22.

Excitement ran high in the model town, about eight miles from Lahore, on the main Ferozepore road, when the news was spread that the Secretary of the model town had ordered the demolition of a raised portion of ground which had been used as a mosque for a number of years.

It is reported that some land in front of the Model Town Club was being levelled for a cricket ground. When the labourers reached the particular portion of ground one of them pointed to the platform used for prayers by Muslims, which the labourers refused to demolish. On hearing this the Secretary and other Executive Members of the Model Town Managing Committee arrived and insisted upon the ground being levelled, assuring the labourers there was never a mosque on that spot. In the meantime the news reached Khansahib Hafiz Jullundhary an Urdu poet, who tried to settle the matter amicably, but when he found the Committee Members insisting upon their own theory, he declared that so long as he was alive he would not agree to the platform being broken down, which according to his religious doctrines he believed to be a mosque. Attempts are now being made to settle the matter, and further developments are awaited.

6-8 A Times of India news report about religious conflict in Model Town Lahore.

⁴¹ By Own Correspondent. (1935). Platform held to be Mosque. *The Times of India* [Bombay]. 24 Oct. p.4.

Planned Facilities vs. Available Facilities

The Town had provisions for the most elaborate facilities in the plan. However in real life its social life was quite limited.

Its only social events were weddings and head-shavings... The two clubs, one for men and one for women, offered facilities for games, but no club life. ... Another novelty was a tea party the day after a wedding, in the last year before partition.⁴²

Commuting from Model Town to the city was not an easy task especially during the war years.

Cars were laid up for lack of petrol; six miles by tonga into Lahore on a hot day was no joke, and the buses had to be booked long in advance. The Model Town buses looked like trucks, and besides their human overload always carried an enormous amount of trunks, bicycles and other heavy goods on top. The 'lorry', as it was appropriately called, had a purdah section in front, and only if that was completely crammed could a woman decently sit amongst the men. Old 'Princess' Sutherland, widow of an English army doctor, and last descendant of Maharaja Ranjit Singh, was heard complaining that she could not get a seat in the lorry, when all Punjab should have been hers! ⁴³

And then came the 'Independence'

Model town, fortunately was not touched by the massacres in the city which erupted in during the independence by partition in 1947.

The turmoil had little impact on the well-to-do who lived around Lawrence Gardens (today's Bagh-e-Jinnah), and on either side of the canal which ran on the eastern end of Lahore. We went about in our cars to our offices, spent evenings playing tennis at the Cosmopolitan or the Gymkhana Club, had dinner parties where Scotch which cost Rs 11 per bottle flowed like waters of the Ravi. In elite residential areas, the old bonhomie of Hindu-Muslim bhai bhai-ism [brotherhood] continued.⁴⁴

⁴² Tandon, P. (1968). p. 242

⁴³ Ibid.

⁴⁴ Singh, K. (1997). Last Days in Lahore: From the brittle security of an elite rooftop, a view of a city burning. *Outlook* [Delhi]. 28 May.

However the disturbances in the inner city areas compelled the Hindu and Sikh residents of the town to flee from the area.

It saddened me to see people packing up or leaving with their luggage in cars, trucks or to gas. The sight of empty houses with cattle grazing on their lawns depressed me even more. Model town was fast becoming a deserted place--shops closed, gates locked and no one to talk to--- exactly like a ghost town in a story book. Then from several nights from the roof of our house, I saw the glow of that big fire which had burnt down the Shahalmi Gate area in the city. It horrified me.⁴⁵

And this ended the peaceful suburban life for majority of the Town's residents.

So life would have gone on in a peaceful routine until the end for all these old engineers, doctors and civil servants, if they had not had to pay the price for the freedom of India. A few died peacefully before partition, but most had to start life anew, living in small flats with sons, and sometimes even, swallowing their pride, with daughters. And their wives had to leave their spacious courtyards, where they had ruled over servants and daughters-in-law, to be dependent on a son, and happy if they were a help and not an unwelcome intruder. Wherever they had to go, they were uprooted from the life they had themselves created.⁴⁶

And only things that were left behind were numerous untold stories, lovely memories and cherished souvenirs. Hence, Som Anand still keeps a ticket of Model Town Bus Service in his pocket, Pran Neville is called *Chalta Phirta Lahore* (a living example of Lahore) and Diwan Khem Chand proposed a similar Model Town in Delhi (discussed earlier in Chapter 3).

Model town was not the same after partition. With ample empty properties available, it became a cluster for refugee settlements.

There were so many new faces in our neighbourhood that sometime I felt as if it was a new place⁴⁷. The unsettled conditions of life had brought swarms of newcomers to model town who were, strictly speaking, not white-collar

⁴⁵ Anand, S. (1998). *Lahore: Portrait of a Lost City*. Lahore: Vanguard. p. 62.

⁴⁶ Tandon, P. (1968). p.

⁴⁷ Anand, S. (1998). *Lahore: Portrait of a Lost City*. p. 80.

people⁴⁸ ... A vegetable seller was heard shouting *chaley gaey heeray aa gaey kheeray* [the jewels have gone and the cucumbers have come]. It was said humorously but was a fact that Hindus and Sikhs ate more veggies in their daily food than Muslims and those days very few had enough money to buy them.⁴⁹

Madanjeet Singh, a UNESCO Goodwill ambassador, has described his experience of leaving from Model Town Lahore as follows.

Within days the security situation deteriorated sharply, as Hindus and Sikhs were waylaid, stabbed, killed or wounded. With my beard and turban, I was a conspicuous target in the streets and could no longer use my bicycle...The doors of Government College and New Hostel were shut, so when I was invited to stay with a family I knew in Model Town, a suburb of Lahore, I went gladly. But on learning a few days later that my host Tandon was also packing to leave, I decided to join ... I departed in a hurry, with only a suitcase, leaving everything else behind.⁵⁰

As the popular proverb says, 'one man's loss is another man's gain', Sara Ahmed, a professor at Goldsmith's University of London, has expressed her cherish for a battered set of Shakespeare's books that came in her grandfather's possession when he settled in the Model Town after partition and were later passed on to her father and then her.

During partition my family left India to become citizens of the newly formed Pakistan. It was an imperial journey; a hard and painful one... After their arrival in Model Town, Lahore, they found the books—left in the house by those who had left in a hurry.⁵¹

With the independence of the British India, the Model Town not only lost a vast majority of its residents, but at the same time it lost its meaning and the character and as a result, its distinctiveness. The time when the Model Town

⁴⁸ Anand, S. (1998). *Lahore: Portrait of a Lost City*. p. 84.

⁴⁹ Ibid.

⁵⁰ Singh, M. (2005). *The SASIA Story*. Paris: UNESCO.

⁵¹ Ahmed, S (2006) *Queer Phenomenology: Orientations, Objects, Others*. Durham USA: Duke University Press. pp. 151-2.

was conceived and developed collates with the Freedom Movement in India, and in this context, raises several questions and prospects. It signifies a class which believed in forward-thinking yet it favoured traditional values. At a time when Indian National Congress, Muslim League and Akali dal had started raising their voices for a free India, with the possibility of free independent states based on religious majority, these cosmopolitan people were willing to live together negating the notion of traditional religion-based nationalism in favour of western styled location-based nationalism. All this was implemented near a city which was the last major city to be occupied by the British in India and hence depicted the best practices of the Raj. Nobody would have predicted that later this city would become the political battleground for all these parties resulting in the end of the Model Town *as it was*.

In conclusion, making of the Model Town while initiated as a strong inspiration to garden city model was, in fact, resultant of a wider scenario. It brought together affluent people from different religious and professional backgrounds from all over India, who were willing to live together with mutual co-operation. In 1930 Khem Chand summarized this entire process as

In this country where the Garden City movement was non-existent and the cooperative movement little understood, it was no easy matter to collect over 900 individuals belonging to the most critical class and having different religious opinions.⁵²

⁵² Vandal P. And Vandal S. (2006). *The Raj, Lahore and Bhai Ram Singh*. Lahore: National College of the Arts. p. 94.

Public Architecture



Photographer: Unknown

CMTS website

c. 2008

7–1 The Club Building (now known as the Society Office Building)

The Club Building (c. 1924) was the first public building to be erected in the town. It is considered one of the best examples of colonial architecture of Lahore.

CONTENTS	Public Buildings
	Religious Buildings
	Indigenous Indian Architecture for the Twentieth Century

The administrators of Model Town were not able to realize their dream of an ideal town to its fullest due to financial constraints. Under these circumstances the built environment of early Model Town comprised of some public buildings, different types of residences and a few religious buildings amidst a vast unbuilt area which until 1970's was a forest-like area¹. Unfortunately many of the older drawings have been destroyed due to negligence and poor maintenance (discussed in Chapter 2). This chapter is aimed at the architectural design of these buildings and how these compared to contemporary architecture of British India in general and Lahore and Punjab in particular.

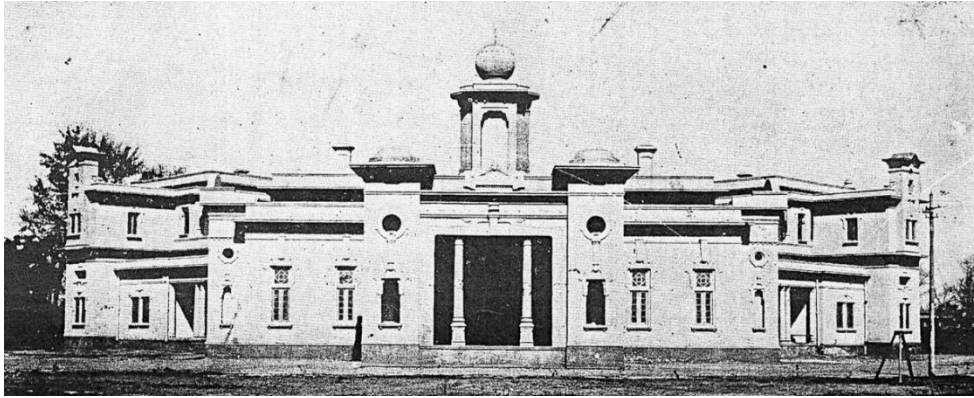
Public and Ancillary Buildings

In the plan of Model Town a variety of public buildings was proposed (discussed in previous Chapter). However until 1947, only a few of them materialized. These included the gentlemen's Club, Ladies Club, Post and Telegraph Office and a Dispensary, **4-22**. Amongst the ancillary facilities bus stop shelters and a powerhouse were also constructed, **4-24, 4-28**.

Gentlemen's Club

Gentlemen's Club was the first public building to be constructed in the Town (discussed in detail in Chapter 3). While it was (and still is) known as the club building, it has never been used as a club. In its earlier days it was used a dak-bungalow, and a Town Hall and today it houses the offices of The Co-operative Model Town Society.

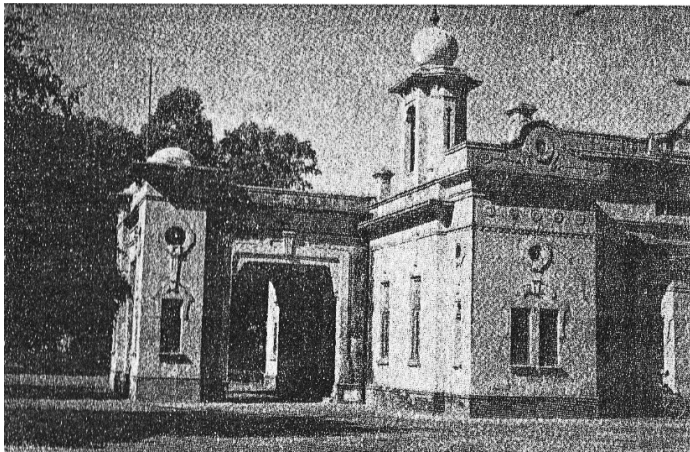
¹ The issue of rapid urbanization of the Town in the 1990's always came up in discussions with the residents and the Society officials. All of them narrated how they or their parents had experience a quiet peaceful area amidst a densely planted area.



Photographer: Unknown

c. 1936

7-2 Front Facade of the Club Building

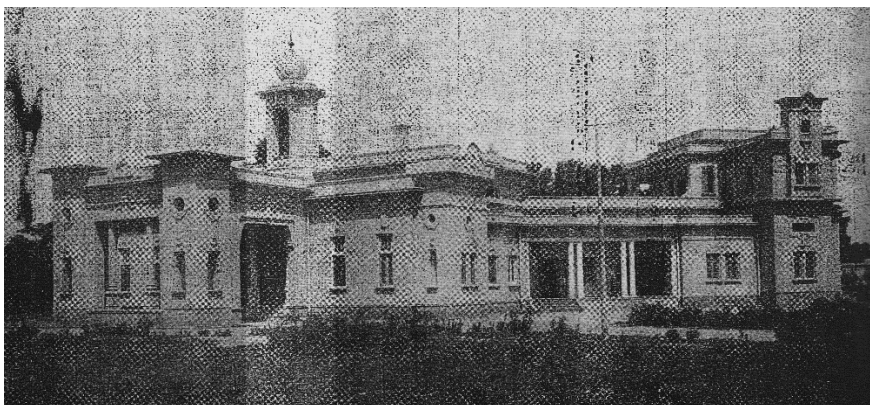


Photographer: Unknown

CMTS Souvenir

c. 1951

7-3 The Entrance Porch of the Club Building

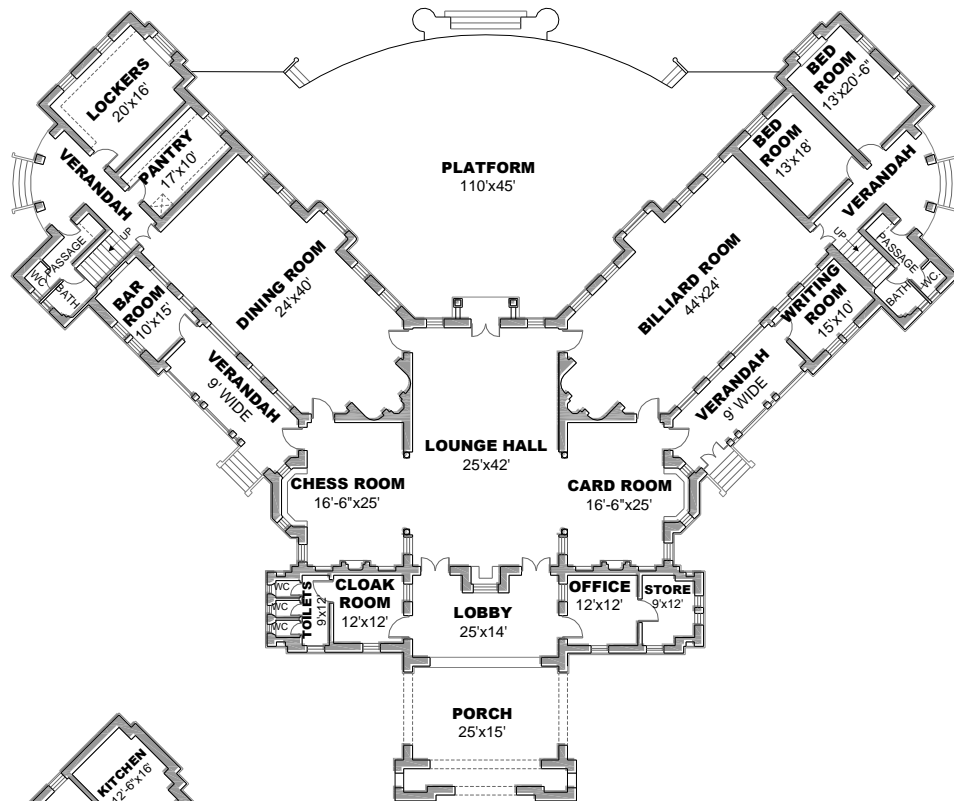


Photographer: Unknown

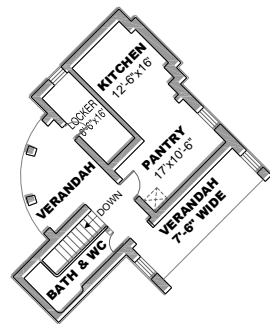
The Scheme for a Model Town and its Realization

c. 1930.

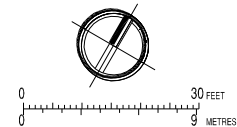
7-4 A View of the Club Building



GROUND FLOOR PLAN



MEZZANINE FLOOR PLAN

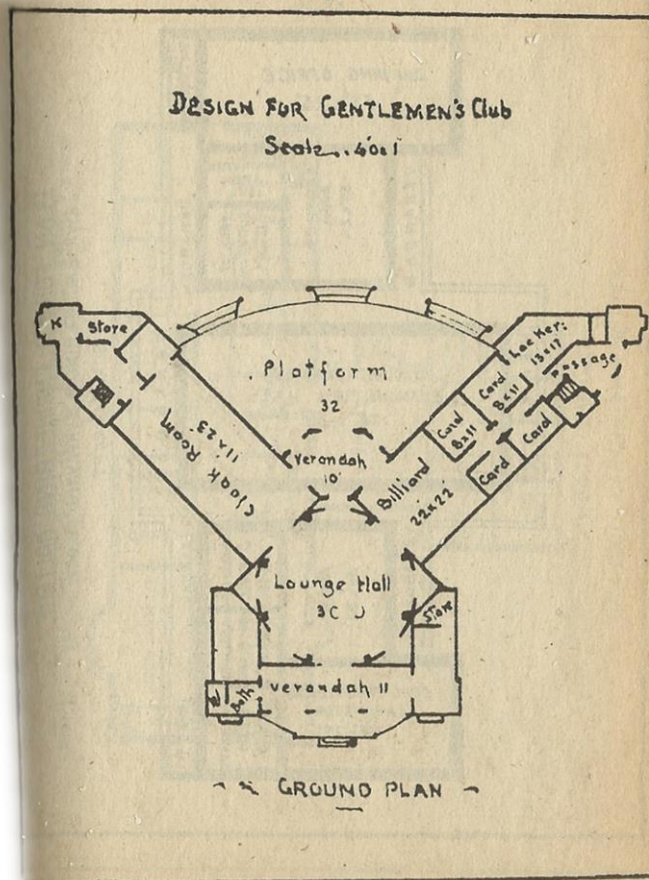


Drawn by: Shama Anbrine

CMTS records

2013.

7-5 Plan of the Gentlemen's Club



Drawn by: Unknown

Ram, G. (1927). Pocket Book of Engineering. p. 541
c.1927.

7-6 Design for Gentlemen's Club

There is no information given on the building regarding the architect of the building, but the plan is similar to the generic plan of a gentlemen's club in Sir Ganga Ram's Pocket Book of Engineering, 7-6.

The main entrance to the building is a through a drive-through porch, which is accessed from the main gate through a metalled road. The main entrance opens into a large entrance lobby. This lobby is flanked by an office and a cloak room on its either side and opens into a vast lounge-hall which has a card room and a chess room on its either sides. Beyond this lounge hall the building projects in two angular wings. One wing includes a billiard room, and the second a dining room which are accessible from the lounge-hall. Both these wings have separate subsidiary entrances to access other areas. In the

wing comprising the billiard room, two bedrooms are provided which are accessible from a circular verandah at the end of the wing. This verandah also adjoins the billiard room and gives access to a toilet block and a staircase leading to the mezzanine floor. A writing room is also present in this wing. It is accessible through another subsidiary entrance close to the main entrance is located at the end of a corridor-like verandah. Unlike the circular verandah, it has no access from other parts of the building. Likewise in the second wing, there a block comprising lockers, pantry and toilets which are accessible from a circular verandah and a staircase leading to the mezzanine floor. The mezzanine floor in both wings contain a kitchen pantry and lockers. The lounge-hall opens into a vast circular platform. This part of the building did not materialize and the lounge-hall opens into a rear garden which was later converted into a tennis court.

The exterior of the building was finished in white stucco paint. Throughout the building surface decoration features were used sparingly. Most of the surface decoration was due to structural elements like cornice projections supported on decorative brackets. The entrance porch, the rear porch and circular verandahs were flanked by columns with decorative bases and capitals. The opening, doors, windows and ventilators, had decorative projections above them which also served for the purpose of shading. The windows of the mezzanine floor were decorated on the exterior as a *jharoka* [a traditional projected bay window]. There was a single *chhatra* [cupola] crowning the entrance lobby.



Photograph by:
Shama Anbrine
2011.

**7-7 Entrance Porch
Front View**



Photograph by:
Unknown
CMTS Website
2002.

**7-8 Entrance Porch
View from Main gate**

The basic structure of the building consists of 18" (457 mm) and 22 ½" (571 mm) thick brickwork. The columns are constructed of reinforced cement concrete. The floors are coloured cemented concrete while the roofs are constructed of reinforced brick concrete over wooden batons.



Photograph by: Shama Anbrine
2011.

**7–9 Base and Capital of the Columns
used in Entrance and Rear Porch**



Photograph By: Shama Anbrine
2011.

7–10 Rear View of the Club building



Photographs by: Shama Anbrine
2011.

7-11 Decorative Features

Top Left: Chhatri, Top Middle: Exterior of a Ventilator, Top Right: Exterior of a mezzanine floor, Bottom Left: Covered Verandah on Roof top, Bottom Right: Exterior of a window on Ground Floor



Photographs by: Shama Anbrine

2011

7-12 Decorative elements in the building

Left: Decorative Motif on an exterior wall Right: A Jharoka

The reuse of club building as an office building has had several consequences affecting the overall ambiance of the building itself. Where at one hand we see clerical desks and metal storage units occupying the spacious lounge-hall, on the other the high level officials of the society trying to convert open terraces into modern glass-clad offices. The resultant office, however, needs to be covered with canvas cloth in the extreme summers (which usually lasts 8 to 9 months) of Lahore.



Photograph by: Unknown
CMTS Website
2002.

7-13 The Circular Terrace (Before)



Photograph by: Shama Anbrine
2011.

7-14 The Circular Terrace (After)

The building requires heavy maintenance and hence the additional entrances were closed to improve the security of the building. Also white coloured finish was difficult to maintain so the administration opted for a beige coloured weather-shield paint. However the paint did not form a good finish with the stucco paint underneath resulting in flaking in various places. Similarly a very details on the interior walls exists. Many have been removed due to ill-maintenance and damage during renovation.



Photograph By: Shama Anbrine
2011.

7-15 A closed entrance



Photographs By: Shama Anbrine
2011

7-16 Decorative details in the interior

Left: Detail of a Doorway; Right: Detail on the entrance of the Billiard room



Despite these problems, the club building still reminds of the aspirations, enthusiasm and dreams that the creators of Model town tried to realize as living architecture in the form of this building. It is quite sad that the building could not use its full potential as a club similar to the Gymkhana or Services Club. (discussed later in detail).

Post and Telegraph Office



Photographer by: Unknown

CMTS Souvenir

c.1951

7-17 The Post and Telegraph Office

The Post and Telegraph Office building was constructed in 1935. There is no information available about the architect/designer of the building and the plans are not available in the records of the CMTS.

The main entrance of the building, a large podium with overhanging lintel slab as a shade, is accessed through a brick paved wide foot-path. The main part of the building is a large hall. Originally the building comprised of two office rooms on either side of this central hall.



Photograph by:
Shama Anbrine
2012.

**7-18 The View of
the Post Office
building on
entering from the
main gate**



Photograph by:
Shama Anbrine
2012.

**7-19 The Front
View of the Post
Office building**



Photograph by:
Shama Anbrine
2012.

7–20 View of the later extension in the Post Office building

The services like toilets and kitchenette were provided adjacent to these office blocks. Later this building was expanded on one side to accommodate the CMTS staff association offices.

The original building is a typical modern style building, with thick brick walls finished with plaster and distemper. The basic structural elements like windows doors, podiums and projected slabs are minimalist in design with a standard size and style replicated throughout the building.

Ladies Club

The best place where Khem Chand's views have actually been used in a very progressive way despite their initial chauvinism (discussed in Chapter 3) is the Ladies' Club. From its inauguration in 1930's, it has been a wonderful place to offer a platform for girls and women to indulge in various activities. It offers short courses such as painting, flower-making, sewing and stitching, interior design and computer usage. Various government and private organizations also use the premises of the club for conducting specialist tests for women.

The Ladies' Club building was originally constructed in 1930. However according to CMTS officials the present façade of the building dates back to 1980's. There is no information available about its architect/designer. The building is similar in plan to the Post Office Building, with a large central hall flanked by offices and service areas on both sides.



Photographer: Unknown
CMTS Website
c. 2002.

7-21 Front View Ladies' Club



Photographer: Unknown
CMTS Website
c. 2002.

7-22 View showing the landscape in Ladies' Club

In its exterior the building is quite different than the Post office. The entrance is more grand with five equidistant double-doors above which are transom windows. These doorways are recessed in the wall, thus the wall appears like a colonnade of circular arches and square columns. The portion of wall between the door and the extruded wall is tiled. The rest of the structure is finished in sprayed plaster in chocolate brown colour. The building is accessed through a brick pavement and it substantially landscaped with evergreen plants of various kinds.

Dispensary/Hospital



Photographer: Unknown
CMTS Souvenir
c. 1951

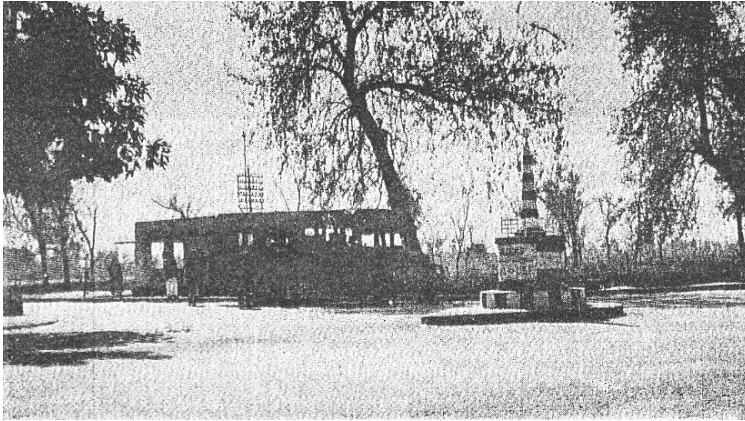
7-23 The Dispensary

In order to provide basic health facilities to the residents of the town a dispensary/hospital was also provided. It was constructed around 1925. Its architect/designer remain unknown and no plan is available in CMTS records.

The only evidence of this building is a photograph published in the souvenir 1951 as presently a complete hospital is located at this site. From the photograph, it can be seen that there was a front verandah behind which were presumably the rooms for doctor/s and dispensers and maybe some area for services like toilets and kitchenette. From the exterior the building is another example of modern style, and its features resemble the Post Office Building; eg. The parapet and the building skyline. The windows have projected lintels for shading.

Bus stops

In order to connect the residents to the city, the CMTS initiated its own bus service. The route of this bus service was to/from Ferozepore road via the circular mall. Accordingly eight bus stops were provided along the Mall, one for each block. These bus stops had rectangular sheds with concrete benches where travellers could wait for their bus.

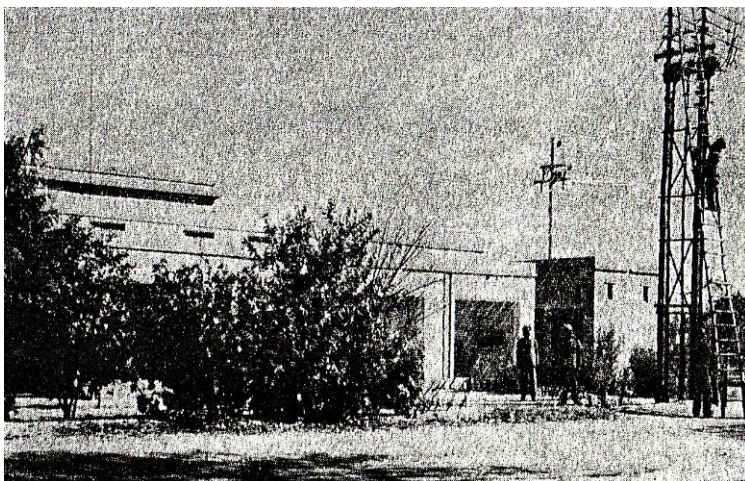


Photographer: Unknown
CMTS Souvenir
c. 1951

7-24 A Bus stop

Power House

Originally the CMTS had generated its own electricity but after the independence the powerhouse was dismantled by a Government order². Its only reminiscence is a photograph published in the Souvenir 1951 which shows a modern style building hidden behind a thick foliage and an electric pole, **7-25**.



Photographer: Unknown
CMTS Souvenir
c. 1951

7-25 The Powerhouse

Religious Buildings

The most valued gift of the Raj was the freedom it gave to its subjects to practice and preach their own religions.³ In this respect, there were 8 places of worship provided in the eight different blocks of the town and a burial ground, a cemetery, and cremation grounds were located on the outskirts. The site of these religious places was nearly circular and located in the centre of

² Lahore, The Co-operative Model Town Society Limited. (1951). *Souvenir* presented to the delegates to The United Nations Economic Commission for Asia and the Far East, Feb-March 1951, Lahore: Lion Press. p. 6.

³ Neville, P. (2006). *Lahore, a Sentimental Journey*. p. xviii

each block. The design of the space was such that it was easily accessible from all main roads. However religious buildings were constructed on only three of these sites. These included a mandir (hindu temple) in D Block, a mosque in A Block and A gurudwara (sikh temple) in B Block. These were run and managed by religious Trusts of different communities.⁴ According to Prakash Tandon:

There were a mosque and a temple, perhaps the most attractive examples of modern religious architecture I have seen in India, and a Sikh Gurdwara⁵.

Mandir



Photograph by: Jawad Zakariya
Flickr.
2009.

7-26 Aerial View of central part of D Block

The Hindu temple in D Block is perhaps the most iconic building of Model town. It remains still depict that it must have been a glorious example of modern

⁴ Varma, K. C. (1937). The Model Town. *The Indian Co-operative Review*. Vol. 2. p. 624.

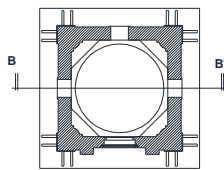
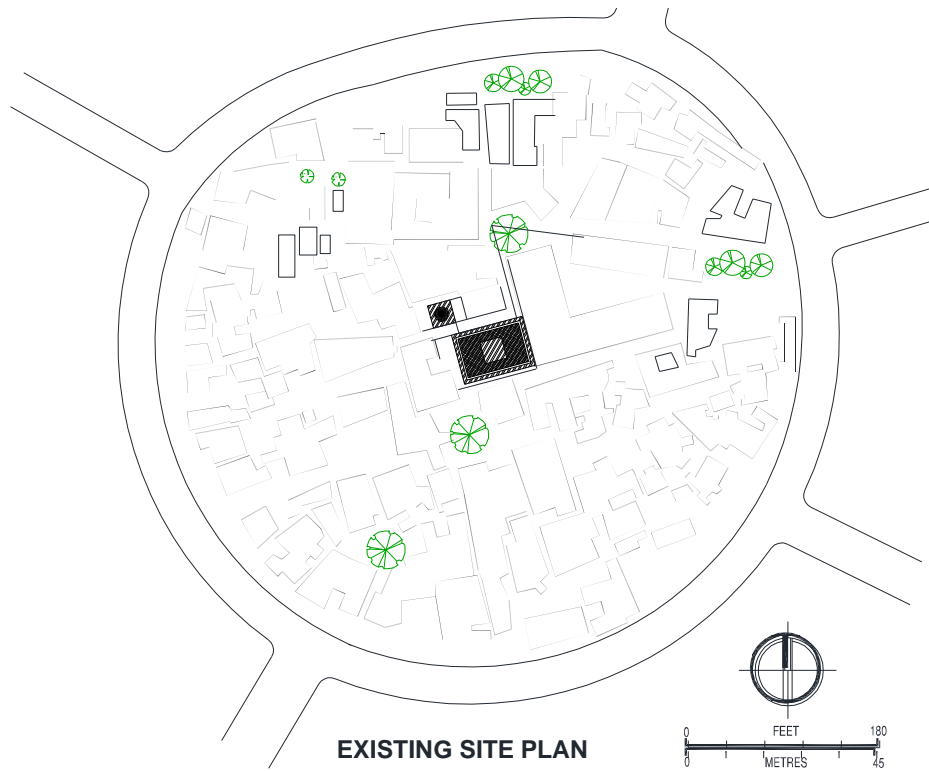
⁵ Tandon, P. (1968). *Punjabi Century 1857-1947*. p. 236.

temple architecture of Northern India in its hay days. Originally it comprised of two adjacent buildings, the mandir and the offerings room, located in the midst of a vast circular open space spreading over more than two acres. Presently it is in a dilapidated condition narrating its story of fate in time and space. In its early days, the mandir might have witnessed visits and offerings from Hindu believers who formed a vast majority of population of Model town. However in the events that resulted in the aftermath of independence, they migrated and Muslim refugees settled in its surroundings. Due to availability of ample open space with no caretaker, encroachments emerged at the site of the mandir. These were shops selling variety of goods and services, and small residential buildings. The buildings of mandir were no exception as the offerings room was included in one of the residences while the main part of the mandir became part of a girl's primary school. Today the area is known as "mandir market" and is the most densely built area in the entire Model town.

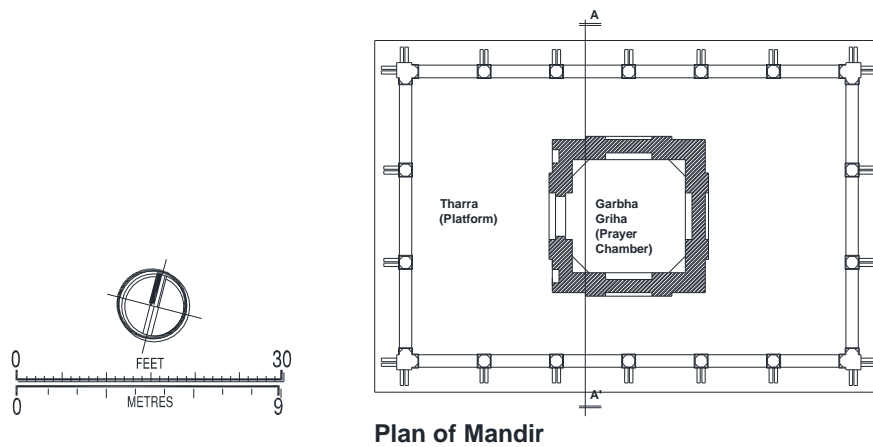
The plan is composed of two single-room buildings. The larger of them is the main mandir in which a square room, *garbha griha* (shrine), is placed in the centre surrounded by a rectangular *tharra* (raised platform) with width greater in front and back as compared to the sides. The entrance to the *garbha griha* is from the north-eastern side through a doorway. The doorway has a projection above which there is a rectangular panel. Now under a layer of white-wash there was once a painted inscription comprising of verses from Bhagavat Gita.

There are niches at various places on the exterior of the *garbha griha* wall where *murtis* (deity statues) might have been placed. Thus the *tharra* would have served the purpose of circumambulation of the *garbha griha*. A colonnade bordered the *tharra* beyond which was a small pond⁶. The elevation of the mandir can be subdivided into five zones; Foundation, Columns, Frieze, cornice and *sikhara* (rising tower).

⁶ There is no physical evidence of the pond but the older people living in the vicinity recall a pond in the area where they used to play in early 1950's and 60's. Ponds are an important part of all mandirs so this is quite probable.



Plan of Bogh Mandir (Offerings room)



Drawn by: Shama Anbrine

2012.

7-27 Plan of the Mandir



Photograph By: Shama
Anbrine
2012.

7-28 Entrance to Garbha
Griha



Photograph By: Tahir Iqbal
2011.

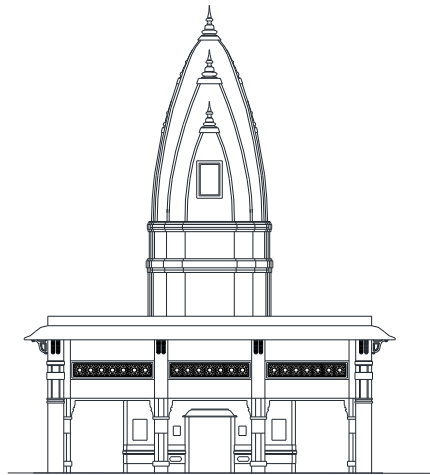
7-29 Inscription over the
Entrance to Garbha Griha

The inscription from Bhagavat Gita over the entrance are the verses;

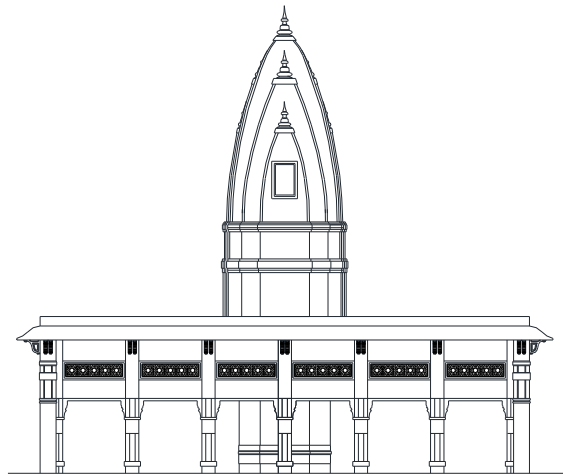
यदा यदा हि धर्मस्य ; ग्लानिर्भवति भारत ।; अभ्युत्थानमधर्मस्य तदात्मानं; सृजाम्यहम्

*yada yada hi dharmasya, glanir bhavati bharata, abhyuthanam adharmasya, tadatmanam shrujamyaham (Whenever and wherever there is a decline in religious practice, O descendant of Bharata, and a predominant rise of irreligion--at that time I descend Myself.)Bhagavad Gita, Chapter IV, Verse 7.*⁷

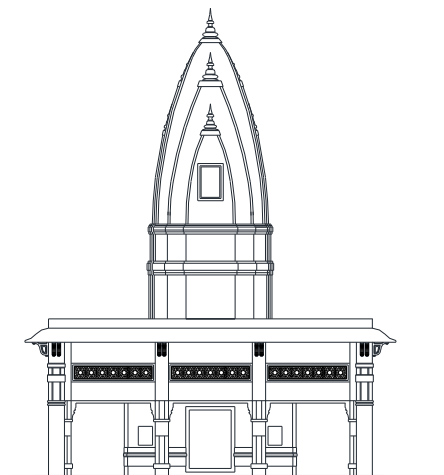
⁷ <http://www.bhagavad-gita.org/Gita/verse-04-07.html>



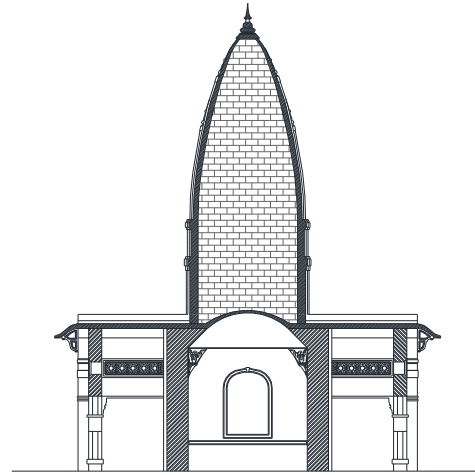
**FRONT ELEVATION
(NORTH EAST)**



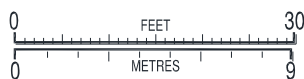
**SIDE ELEVATIONS
(NORTH WEST & SOUTH EAST)**



**REAR ELEVATION
(SOUTH WEST)**



SECTION AA'



Drawn by: Shama Anbrine

2012.

7-30 Elevations and Section of the Mandir



Photograph by: Shama Anbrine
2012.

7-31 Exterior of the Mandir

Since the mandir is part of a girls' primary school, the dilapidated structure has been blocked by a boundary wall. Thus only parts of the structure are visible.

The foundation of mandir was a brick tharra originally raised from the adjacent ground. The exact level difference cannot be ascertained as floor of tharra is dilapidated and covered with loose bricks and rubble, 7-28. On this platform stood the columns were raised which comprised of a square base and capital with an octagonal shaft. The frieze rests on a square abacus which is supported by the columns and brackets. There are rectangular openings in the frieze, one corresponding to each span between the columns, which are adorned by a geometrical grillwork. The flat roof of tharra culminates in a projected cornice which is supported by modillions above the frieze. The garbha griha is crowned with a sikhara which was once capped with a high golden *kalas* (finial).

The building was finished in exposed brickwork for the colonnade and plaster and paint for the garbha griha interior and exterior. The sikhara is similar to a conical elongated pyramid. It rose in three stages over the square plan. The

number three depicts the concept of *trimurti* (the three primary gods in Hinduism) and has been used in construction of arches (as in trefoil arches) in many parts of northern Indian subcontinent. In the interior it transformed into a curved dome false ceiling (now destroyed) using pendentives. The corbelling in the pendentives is hidden behind foliated plasterwork. There is a plaster motif of Lotus flower inside the garbha griha. In Hindu spiritual meditation the lotus has a very special place. It is not only considered pure and beautiful, but also a symbol of goodwill, peace, prosperity and happiness and an omen to get rid of unpleasant things, hence it is referred to as the king of flowers⁸.



Photographs by: Shama Anbrine
2012.

7-32 The tharra surrounding the garbha griha

⁸ Bhalla, P. (2006) Hindu Rites, Rituals, Customs and Traditions. New Delhi: Pustak Mahal. p. 210.



Photograph by: Shama Anbrine
2012.

7-33 The Shikhara



Photograph by: Shama Anbrine
2012.

7-34 The Pendentive with foliated plaster work



Photograph by: Shama Anbrine
2012.

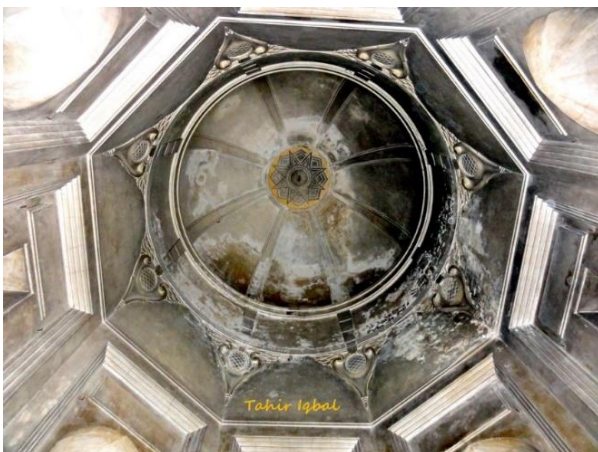
7-35 The Lotus flower motif in garbha griha

The square-shaped bhogh mandir (offerings room) is a comparatively smaller building located adjacent to the main mandir. The most significant architectural element of this building is its bulbous dome raised on an octagonal drum. On the interior there is a domical false ceiling which is quite intricately designed.



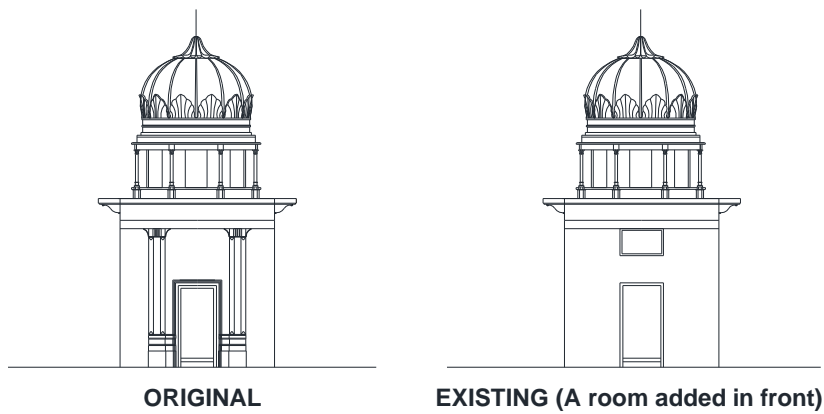
Photograph by: Shama Anbrine
2012.

7-36 The dome resting on an octagon drum over bhogh mandir roof

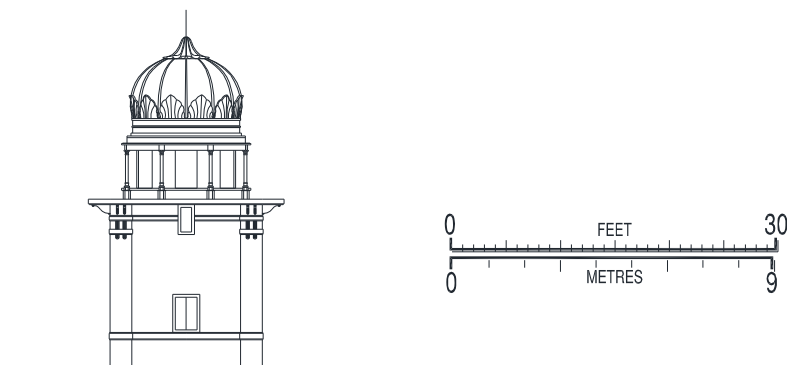


Photograph by: Tahir Iqbal
Flickr
2011.

7-37 Interior of the bhogh mandir dome



FRONT ELEVATION



REAR AND SIDE ELEVATIONS

Drawn by: Shama Anbrine
2012.

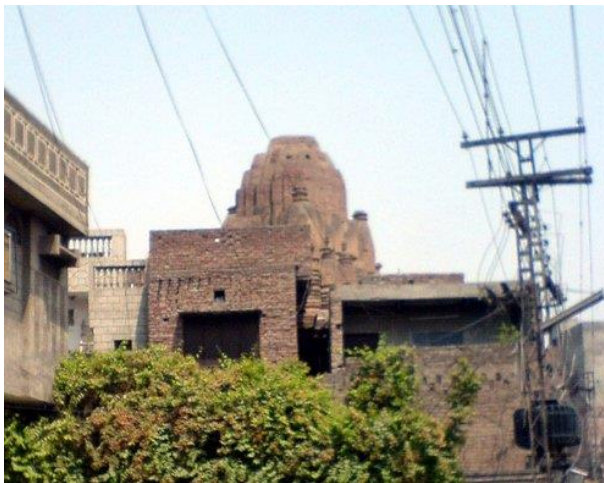
7–38 Reconstructed Elevation of Bhogh Mandir

Mandirs in Northern subcontinent are generally smaller in scale as compared to the South even in pre-1947 era due to the fact that Hindus in the north were less rigid in their religious practices hence the role of a Brahmin was much subdued as compared to the south⁹. However since the religious practices in Hinduism are more focussed towards rituals that involved prayers offered by women, almost every house had a dedicated room serving as a mandir. Unlike other religions like Christianity and Islam where prayer is frequently offered as a congregation, most Hindu prayers are offered with selective people both privately and publically. Hence sometimes a murti placed on a *tharra* (platform)

⁹Anand, S. (1998). *Lahore: Portrait of a lost City*. Lahore: Vanguard. p. 68.

at the end of the street also served the purpose of prayer. However the more affluent people invested in proper mandir buildings¹⁰.

Unfortunately we do not find any complete intact mandir building in Lahore. After the events in the aftermath of independence the Hindu population of the city became extinct and hence, the mandirs were adaptively reused or became part of residential buildings in the absence of any worshippers. In many cases sikharas still survive. However they are in dilapidated condition and in a state of negligence. The mandir in Model Town is no exception, so in the absence of any documentary evidence, the building was physically documented.



Photographs by: Shama Anbrine
2013.

7–39 Existing condition of Mandirs in Lahore

Left: Laal Mandir Data Nagar Badami Bagh Lahore

Right: Bhansi dar Mandir Anarkali Lahore

¹⁰ Ibid.



Photograph by:
Unknown
British Library

7-40 Rattan
Chand's Temple
Lahore

The only building that gives a clear idea about a nineteenth century mandir architecture in Lahore is Rattan Chand¹¹'s temple which was located near Shah 'Almi gate. Though the building no longer exists, its photographs are present in British Library online images and Fred Bremner's archive and a sketch in Latif's book on history of Lahore. The temple and its gardens were irretrievably damaged in the riots which followed the partition of India in 1947¹².

Mandir in Model Town presents a new stylistic legacy in Indian temple design. The basic structure is quite similar to Kipling-Singh hybrid buildings, with exposed brickwork, geometric grillwork, brackets and cornices, instead of lofty effect of Rattan Chand's temple. The sikhara, however, is similar to Rattan Chand's temple which also rises in three stages although its present condition does not reflect the kind of decoration (if any) which was applied to its exterior. Overall, the mandir building conforms to a hybrid style and this reflects a wider change in the society where two contradictions were at work simultaneously.

¹¹ Rattan Chand was a little boy when he joined Ranjit Singh's court. He served Maharaja with distinction and was awarded a prime plot of land where he erected a temple to Shiva. Rattan Chand prospered even with the change of power to the British in Lahore from 1849. He served the city by joining the British administration, he was able to develop the area around the temple with gardens filled with fruit trees and a huge tank or reservoir, making it a well-known feature of the city. Rattan Chand died in 1872. He was called Rattan Chand Darhiwala (bearded) by the Maharaja in order to distinguish him from another courtier of the same name. Latif, S.M. (1892). *Lahore: its history, architectural remains and antiquities*. p. 321

¹² British Library Online Gallery description lists the riots of 1947 being the cause of its destruction.

On one hand everything was influence by the norms of being modern and up-to-date, yet the traditional aspects and values were deemed important to maintain the essence of religiosity.

Gurudwara



Photograph by: Shama Anbrine
2012.

7-41 The Gurudwara (Sikh Temple) in B-Block Model Town

The gurudwara in B Block was constructed by Sir Ganga Ram who despite being a Hindu had a strong affiliation with Sikh religion¹³. This building was also abandoned in 1947 and is presently being used a residence. However the Auqaf Department of Government of Punjab which is responsible for *matrooka waqf imlaak* (abandoned heritage buildings) is trying to have the building vacated¹⁴. According to the owners the building was a roof-less enclosure when they occupied it in the 1950's and they have undertaken several alterations to the building interior to accommodate their needs.

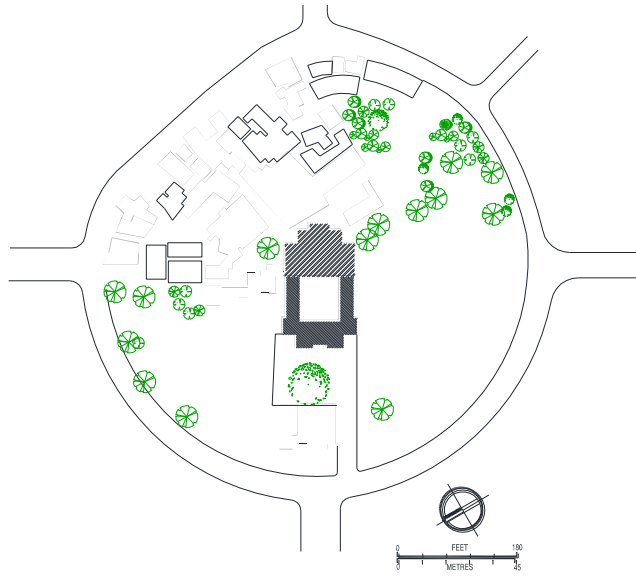
¹³ Ahmed, K. (2001). *Pakistan: Behind The Ideological Mask: Facts About Great Men We Don't Want To Know*. Lahore: Vanguard. p. 125.

¹⁴ Discussion with present residents of the Gurudwara.

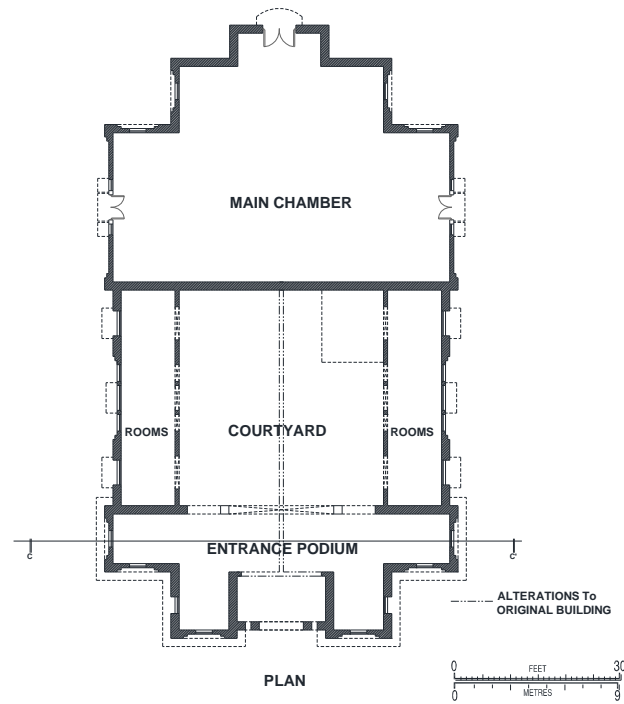
The plan of the building is symmetrical along vertical axis and comprised of two main sections, the courtyard and the main chamber. According to nearby residents, there was a pond surrounding the building. The entrance to the gurudwara was through the pond¹⁵. The front entrance of the building is gateless. Upon entrance there was a large podium which opened into a courtyard. The courtyard was flanked by long rooms on either side. On the extreme end of the courtyard was the main chamber but there is no connection between the courtyard and the chamber directly. The main chamber was accessed directly from outside via three doorways. It is likely that the courtyard area was used for *langar* (a vegetarian meal served to the congregation) while the main chamber area was used for congregational prayers.

From the exterior, the structure is in a quite dilapidated condition. The present owners have bricked all the windows which were not needed for ventilation. The front windows are recessed in wall within a series of two rectangular and a multi-foil arch frame. Windows have projection over them. There are *jharokas* (traditional bay windows) on the side walls which might have been elaborately decorated. One striking feature is the remains of brackets at the top of the walls which suggest that there might have been a further design element like a cornice. However the possibility of a roof is quite minimal as Sikh religious activities are usually performed in large congregations in open air. Similarly most of the gurudwara's in Punjab have large courtyards and open spaces to accommodate the worshippers.

¹⁵ The pond does not exist now, but all Sikh gurudwaras require any person entering the premises to walk through a water channel before entering the temple area.



EXISTING SITE PLAN



PLAN

Drawn by: Shama Anbrine
2012.

7-42 Location and Plan of the Gurudwara



Photograph by: Shama Anbrine
2012.

7-43 Side View of Gurudwara

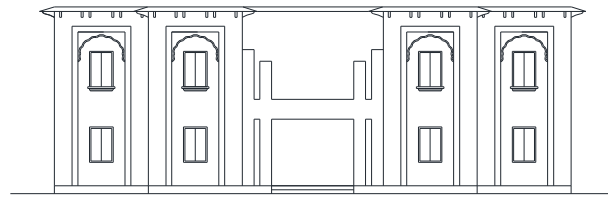


Photographs by: Shama Anbrine
2012.

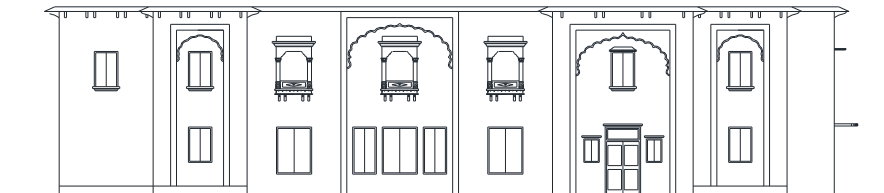
7-44 Decoration details

Left: Entrance to the Main Chamber

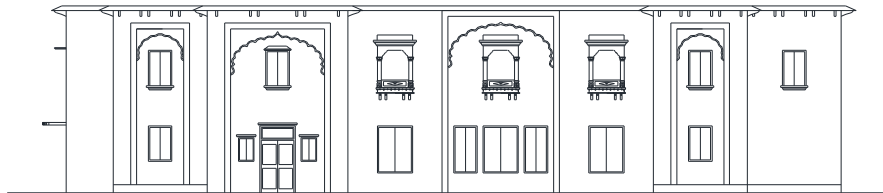
Right: Detail of a Jharoka



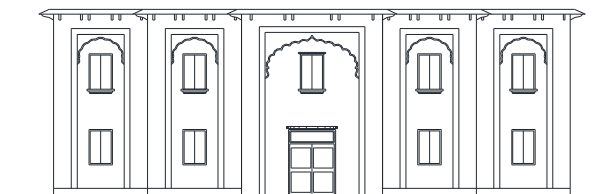
FRONT ELEVATION (North West)



SIDE ELEVATION (South West)



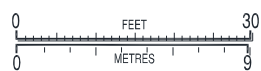
SIDE ELEVATION (North East)



BACK ELEVATION (South East)



SECTION CC'



Drawn by: Shama Anbrine
2012.

7-45 Reconstructed Elevations and Section of Gurudwara

Gurudwara buildings in Punjab are recognized for their distinct and elaborate decoration of building exteriors. Carved plasterwork decoration, recessed arches, along with elaborate domes and chhatris are used to glorify the building. Yellow or golden paint is used to highlight different surface features.



Photograph by: Unknown
Shiromani Gurdwara
Parbandhak Committee
2002.

**7-46 Gurudwara Punja Sahib
Hasan Abdal**



Photograph by: Unknown
Shiromani Gurdwara
Parbandhak Committee
2002.

**7-47 Gurudwara Dera Sahib
Lahore**

In this context, the Model Town gurudwara also offers a modernized version of traditional Sikh temple style. There are numerous surface and structural decoration features but the building exterior is relatively simple in style in comparison.

Masjid



Photograph by: Unknown

Souvenir

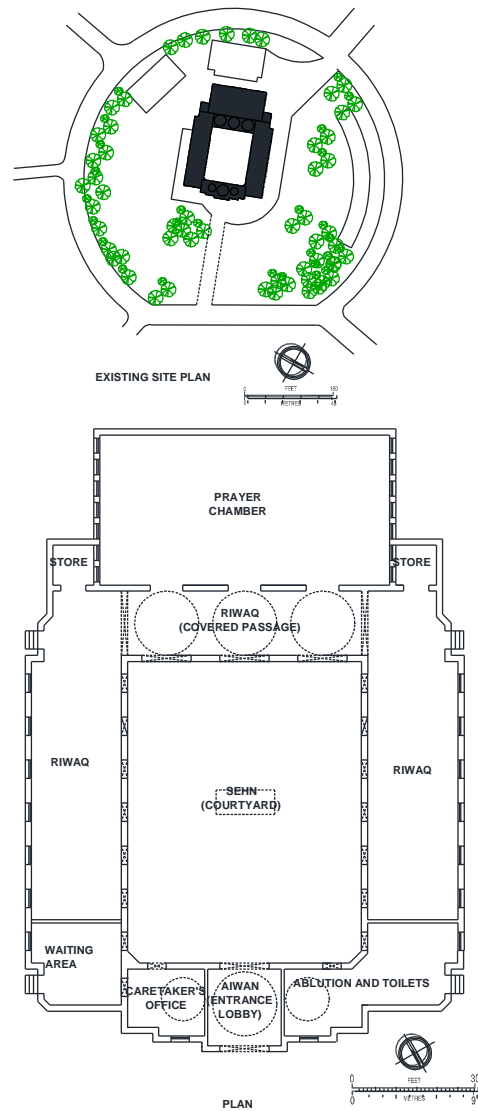
1951

7-48 Masjid A-Block Model Town Lahore

The masjid (mosque) located in A Block is perhaps the best preserved religious building in the Town. The building was built in 1938. Since then the building and the surrounding site has been under the administration of an Islamic Trust funded by the Muslim residents of the Town which has continued to provide for its regular maintenance and up-gradation.

The masjid is located into a vast nearly circular garden-like site. Originally the pathways leading to the masjid were brick paved while presently some of the brick paving has been replaced with concrete pavers. The plan of the masjid is symmetrical along a vertical axis located at 13 degrees South of West to face the Kaaba. The entrance is through an *aiwan* (entrance lobby) with shoe racks (as the worshippers enter the sacred parts of the masjid without shoes) which opens into a large *sehn* (courtyard). On one side of the aiwan are the toilets and ablution area and on the other side a caretaker's room. Both these areas are accessible from outside the building and the courtyard. On three

sides of the sehn are riwaq (covered passages). The front riwaq opens into the *maksura* (prayer chamber) while the side riwaqs open into store rooms and the front riwaq. Behind the masjid there are Trust Offices in a separate building.



Drawn by: Shama Anbrine
2012.

7-49 Location and Plan of the Masjid



Photograph by: Shama Anbrine
2012.

7-50 Front View of the Mosque



Photograph by: Shama Anbrine
2012.

7-51 The Steel Plaque



Photograph by: Shama Anbrine
2012.

7-52 The Moulded Plaster Grillwork

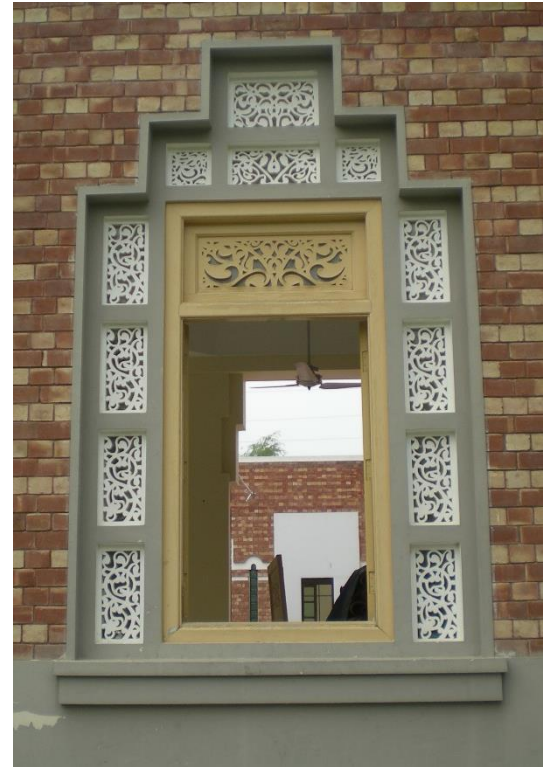
The exterior of the building is quite majestic. The entrance, a large pointed arch recessed opening, is spanned by a double-height aiwan which is crowned by a pointed dome with decorated turrets topped by chhatris on either side. While the structure is exposed brickwork, the entrance has been differentiated by using *surkhi* (literally meaning red, a water-based paint made from brick powder) and white paint on recessed or projected surfaces. Two steel plaques on either side of the entrance arch show the name of the masjid, its inauguration date and logo of the Trust while a calligraphic panel above the crown of the arch depicts three verses. The first is an *ayat* (verse) from Quran, the second is a *dua* (prayer) from *hadeeth* (Prophet Muhammad's sayings) and the third is a religious poetic verse.



Photograph by: Shama Anbrine 2012.

7-53 The Inscription over main entrance

There are several rectangular punctures in the wall which are filled with foliated grillwork in white plaster. There are two windows in the front wall which are spanned by corbelling arch. These comprise of a central window opening with wooden frame with a top carved panel. Above this panel is a plain wooden pane on which a religious poetic verse in Persian is calligraphed. On the sides of the windows as well as above the poetic pane plaster grillwork has been used. All other windows of the masjid are of similar design excluding the poetic pane.



Photographs by: Shama Anbrine
2012.

7-54 The Windows

Left: The Front Wall window Right: Typical Window Design



Photograph by: Shama Anbrine
2012.

7-55 Interior of a Dome

The aiwan-like entrance with pointed arch is repeated at the front riwaq which is crowned by triple pointed bulbous domes. The central dome is bigger than the side domes. The zone of transition of all domes is through pendentives. The interiors of the domes have concentric circular pattern where the innermost circle is transformed into a foliated motif.

The rest of the building is comparatively simple in design, with regular sized equidistant windows on the exterior and similar columns in the riwaq. The columns of the side riwaqs are simple where recessions, projections and colour contrast has been used to define the edges.



Photograph by: Shama
Anbrine
2012.

7-56 Exterior Side wall



Photograph by: Shama
Anbrine
2012.

7-57 The Riwaq Columns

After a lapse of nearly seventy-five years, the buildings has had to adapt to several climatic factors. The most noticeable is the installation of fans in the sehn to provide comfort to the worshippers in the scorching heat of Lahore in the afternoon prayers. The steel pipe framework for fan installation is also used to mount green canvas cloth above the sehn to provide further cooling.

The design of Model Town Masjid has been termed as ultra-modern¹⁶ but in terms of space planning it follows the principles of a typical Mughal mosque. The plan comprises of a vast maqsura and a sehn with riwaqs on three sides and a grand aiwan on the fourth side. The exterior, however, is quite modern with controlled decoration. Use of exposed brickwork tries to harmonize this building with the public buildings of the city. A noticeable exclusion in the design is the absence of a *minar* (minaret). Nevertheless, due to proper management and maintenance the masjid is regarded as one of the best in the city.

Indigenous Indian Architecture for the twentieth century

The architectural character of public and religious buildings of Model town give a strong insight into the transformation of Indian architecture in the twentieth century by the early local architects who were trained on western ideologies if not in the west. Before the advent of these local architects, all the major cities in India had developed a strong architectural character under the influence of British architects. Earlier British architects like Robert Chisholm (1840-1915) favoured Indo-Sarcenic style by declaring in 1883 that

‘An architect practicing in India should unhesitantly elect to practice in native styles’¹⁷

Later architects, however, elaborated the style by incorporating and practicing with amalgamation of various local and foreign ideas. British architect (later Sir) William Emerson (1843-1924) had observed that British architects working

¹⁶ Unknown Author. (1954). The Model Town. *The Pakistan Review*. Vol. 2. p. 26

¹⁷Robert Chisholm as quoted by William Emerson at the eleventh meeting of RIBA. See. Unknown author. (1884). Societies. *British Architect*, 1874-1919. (21)21 (May 23). p. 256.

in India had to consider various aspects in arranging buildings suitable to Indian purposes which they not of brought in contact with while in practicing architecture while in England.¹⁸ While he clearly advocated the adherence to climatic factors, especially natural ventilation in proposed designs for India¹⁹, But there was one clear difference in his thoughts with regards to Imperial buildings in India for which he clearly stated that

'buildings erected under the British Raj for any purpose connected with the natives, whether for Government, education, or charity, should show a distinctively British Character, at the same time adopting the details and feeling of the native architecture, and suiting to the requirements of each particular case.'²⁰

However it was not always the architects who were making their mark on the Indian soil by experimenting with various styles. A large number of buildings, particularly administrative and educational buildings, were constructed under the directives of PWD (Public Works Department) comprising of engineers and military board members. To the British architects the Indian PWD architecture did not rank in high merits as illustrated by the negative comments such as 'an English pseudo-classical style, bald and hideous beyond description'²¹ and 'occasionally ugly enough'²². However in the eyes of the contemporary natives these were innovative and forward-looking due to their imposing character²³. For the locally qualified engineers who had *neither knowledge of nor sympathy with indigenous forms*²⁴ their simple designs which could be replicated with slight modifications for various purposes made PWD style a highly desirable form of designing and constructing the public buildings.

¹⁸ Ibid.

¹⁹ Ibid.

²⁰ Ibid.

²¹ Clarke, C.P. (1883). Some Notes on the Domestic Architecture of India. *Journal of the Society of the Arts*. Vol. 31 No. 1594 (JUNE 8, 1883). p. 731.

²² Kipling, J.L. (1886). Indian Architecture of Today. *The Journal of Indian Art*. Vol. 1. No. 3. p. 1.

²³ Ibid.

²⁴ Ibid. pp.1-2.



Photograph by: Chris

Flickr

2008.

7-58 Eros Cinema Bombay. 1935. Architect Shorabji Bhedwar

The twentieth century, however, saw a promising influx of locally trained architects from the local art schools constructed during the last quarter of nineteenth century Like J.J. School of Arts in Bombay and Mayo School of Arts in Lahore. The architecture produced by them tried to adopt an international outlook by getting inspirations from contemporary architectural movements like modernism and art deco. Despite the political turmoil, the 1930's had seen transformation of Bombay into an Indian art deco capital as well as the grand establishment of New Delhi as the new imperial capital with grand modern and art deco buildings.

When we analyse architecture of Lahore, the last half of nineteenth century was dominated by the PWD works, Gothic and Victorian styles, and the architecture produced by John Lockwood Kipling and Bhai ram Singh Duo which was predominantly inspired from traditional and Indo- Sarcenic

architecture²⁵. In the realm of twentieth century Lahore the Club building of Model Town certainly stand out as the earliest art deco building in Lahore with an amalgamation of intrinsic and bold geometrical surface patterns along with classical columns and projections and a unique far-east inspired single cupola crowning the main entrance.

The other public buildings like post office, bus stops and power house despite their minimalist utilitarian design would have had a strong impact due to their association with modern technology which symbolised progress and being up-to-date at that time.

The religious buildings in the town tried to modernise the centuries' old traditional design practices which were followed religiously. A mandir was designed by eliminating the extensive surface carvings, a core feature of mandir design for centuries, in favour of plain exposed brickwork. Even the interior of the Prayer hall was sparsely decorated, with minimalist motifs. Some traditional features, like sikhara, were still utilised to distinguish the building. The masjid excluded the minaret, an integral symbolic feature, clearly due to availability of loud speakers and utilised Persian poetry in lieu of quranic inscriptions for decoration. At the same time, the arches were replaced by the corbelled designs which was much simpler, yet elegant.

The architecture produced in the Model Town followed the same forward-looking contemporaneity as can be seen from its founding principles. Being techno-scientific modern, the members of the town were willing to experiment in contemporary architectural forms and styles. How these principles were implemented on the residential buildings will be discussed in next chapter.

²⁵ Vandal P. And Vandal S. (2006). *The Raj, Lahore and Bhai Ram Singh*. Lahore: National College of the Arts

Residential Architecture



Photographer: Jawad Ahmed Tahir

Dzynz Architects

c. 2010

8-1 House of Hafeez Jullundry (44-G, Model Town Lahore)

Hafeez Jullundhri (1900-1982), famous Urdu poet who wrote the lyrics of National Anthem of Pakistan, constructed his house in the Model Town in 1929. This photograph was taken before the demolition and reconstruction of the building.

CONTENTS

The Sources of House Designs

House Designs in the Model Town

Towards an 'Indian Bungalow'

The residential area of the Model Town was divided into eight identical blocks with three type of single family bungalow-like houses (discussed earlier in Chapter 5). One of the basic aims of the CMTS was '*to promote the economic and social interests of its members and more particularly to lay out, establish and maintain a garden town*'¹. In the pursuit of this aim the guidelines for construction of the houses were based on two by-laws:

(1) That every house shall have a garden²;

(2) That of the total area of the plot not less than two-thirds shall be garden and not more than one-third built over³.

These by-laws were certainly welcomed by people and critics throughout India (discussed earlier in Chapter 1). Linton-bogle, a strong critic of Indian Town Planning in general, praised these bylaws in the following word:

No better rules can be imagined for ensuring a delightful residential area, cool attractive and healthy, and, where it is possible to enforce such rules, a municipality could not do better than adopt them⁴.

This chapter explores the different factors that influenced the design of these houses, the various types of house designs and their salient architectural and structural features. Towards the end it tries to develop a ground to understand the transference of the native house design from a courtyard dwelling to a bungalow-like mansion.

The Sources of House Designs

In order to understand the house design in the Town, it is important to understand the sources which inspired these house designs. One primary source was the official bungalow pattern book of the CMTS which had several house plans. The exact number of these plans is debatable as Ata Ullah claims it to be sixteen while Prakash Tandon has given this figure as 'some one

¹ Chand, D.K. (1922). *The Model Town*. Part I. Lahore: Punjab Central Press. p. 20-21.

² Ibid.

³ Ibid.

⁴ Linton-Bogle, J.M. (1929). *Town Planning in India*. London: Oxford University Press. p.30.

hundred sample house plans'⁵. However both of them agree that the prospective house owners could choose a design according to their requirements and have it amended before the construction of the house⁶. No pattern book is available in the CMTS records now hence it is not possible to evaluate the credibility of these statements. However various documented sources elaborate on the origins of that pattern book.

The Design Competition

After the successful execution of the design competition for the master plan in 1922, the Society announced another design competition for the model houses in 1923⁷. For this competition it invited designs of residential houses and offered ten prizes; one prize of Rs. 400, two prizes of Rs. 300. Three prizes of Rs. 200 and four prizes of Rs. 100⁸. The deadline for submission of competition entries was June 30 1923.⁹ There is no further information available regarding the outcome of this competition in official documents. However a letter published in the Times of India in January 1924 by person using the pseudonym of Retired Engineer accused the Model Town Society of moral corruption and theft of intellectual property as he had sent designs for competition but was returned neither a prize nor his designs¹⁰.

⁵ Lahore, The Co-operative Model Town Society. (1924). *Annual report for the year 1923* as cited in Ullah A. (1937). *The Co-operative Movement in the Punjab*. London: G.Allen and Unwin. p. 318; See also Tandon, P. (1968). *Punjabi Century 1857-1947*. London: Chatto and Windus. p. 241.

⁶ Ibid.

⁷ Associated Press. (1923). Lahore's Model Town, Main features of lay-out plan, Scheme approved by Government. *Civil and Military Gazette* [Lahore]. 19 May. p.10.

⁸ Ibid.

⁹ Ibid.

¹⁰According to him he had sent certain designs with estimates in June 1923 to the Society for this competition and this matter was acknowledged by the Society's secretary. After one month he contacted the Society for the outcome of competition and return of his plans if they had not been awarded any prize. He was replied that the judgement process is still underway. Two months later, he reminded the Secretary again but received no reply. In November 1923 he contacted the Secretary again and pointed out 'the inordinate delay in disposing of the business and that the delay led one to suspect that an unfair advantage was being taken of the designs which were in their custody'. He never received an appropriate reply. For details see Retired Engineer (pseudonym) (1924). Model Town Society, Lahore. *The Times of India* [Bombay] 10 Jan. p.15.

After the success of the previous competition¹¹, this second competition, nevertheless, would have attracted many entries. Thus, it is quite probable that the CMTS officials developed a resulting pattern book from these designs with a smaller database of plans initially which gradually increased due to more competition entries.

Architects

Original drawings from 1929 to 1937 also give identification of various architects from the stamps and printed names¹². All the drawings bear the name and stamp of Architect M.C. Khanna (full name not known) who was the full-time in-house architect employed by the Society until 1937. Some drawings, however, also bear signatures of other architects and engineers, e.g. I. A. Chishty (no full name available) on behalf of Modern Building Experts (Regd.) Lahore (designed House No. 36-B dated 1937), Chiranji Lall Sharma Architect (designed Houses at 16-B, 101-A, 33-B dated 1937), and Harbans Lal Suri Consulting Engineer and Architect (designed house No. 72-C dated 1937). This implies that probably at some stage, the members were also allowed to acquire services of their own consulting architects but the final plans required approval from the in-house architect before execution.

Pattern Books

Bungalow pattern books have been in circulation throughout the world especially in the first half of 20th century¹³. The concept of a bungalow emerged in the Indian subcontinent from a single-storey mud and thatch cottage and by the early twentieth century it had transformed into an elite residential typology¹⁴. Earlier bungalows in the region were designed by the British Military Engineers and were executed by using the labour, building knowledge and resources of the indigenous native population.¹⁵ Later in the

¹¹ By Own Correspondent. (1922) Model Town's Plans Exhibited. *Civil and Military Gazette* [Lahore]. 20 Dec. p.9.

¹² There is a possibility that many others were involved in design as well. I was allowed access to eleven random house design files. This conclusion has been drawn on a relatively low and pre-selected sample provided to me by the Society Officers.

¹³ King, A. (1984). *The Bungalow, Production of a Global Culture*. p. 12.

¹⁴ Ibid.

¹⁵ Desai, M, Desai, M and Lang, J. (2012). *The Bungalow in Twentieth Century India*. Surrey: Ashgate. p. 123.

Civil stations the Public Works Department undertook this task. However these designs were remarkably similar as noted by John Lockwood Kipling, the founder of the first Architecture School in Lahore¹⁶. Standardization of house plans primarily reduced the task of architectural design for the engineers who could just select any design and detail from the pattern book and adapt it to a site.¹⁷ These plans were generally quite adaptable and could be easily modified to serve different functions¹⁸. Later many Indian Architects also developed their pattern books in the twentieth century; e.g. A. V. Thiagraja Iyer from Chennai published his pattern book in 1916¹⁹; K. C. Joshi from Amritsar in 1937²⁰.

In case of the Model Town Sir Ganga Ram's active participation in the foundation of the Society (discussed earlier in Chapter 3) make his reference book *Pocket Book of Engineering* (first ed. 1887, 5th ed. 1927)²¹ most likely source for inspiration of the house plans. Sir Ganga Ram's Pocket Book of Engineering was first published in 1888 according to Trübner's record²². Due to unavailability of earlier editions of the book, it is not possible to comment on what were the original contents of the book and how they were modified in later editions. The available version of this book is the 5th edition which was published in 1927 (also the last edition as it was published

¹⁶ Kipling, J.L. (1886). Indian Architecture of Today. *The Journal of Indian Art*. Vol. 1. No. 3. p.1.

¹⁷ King, A. (1984). *The Bungalow, Production of a Global Culture*. p.12; Desai, M, Desai, M and Lang, J. (2012). *The Bungalow in Twentieth Century India*. p.123.

¹⁸ Desai, M, Desai, M and Lang, J. (2012). *The Bungalow in Twentieth Century India*. p.124.

¹⁹ Iyer, A.V.T (1926) Indian Architecture. Vol. 3. Madras: A.V.T Iyer and sons

²⁰ Joshi, K.C. (1937). *A Book on Joshi's Modern Designs*. [With Illustrations, Including a Portrait.]. Amritsar: Bir Publishing Company

²¹ Despite the fact that this book was used as a part of Engineering Curriculum in Punjab until 1960's, it is relatively less known and I have not seen it cited anywhere.

²² The complete catalogue details are as follows:

Ram (Rái Bahádur Ganga). ____ *Pocket Book of Engineering*. In English and Urdu. 16mm. pp. 515. Lithographed. Lahore 1888. Sr.

The absence of reference to any edition number implies that it was the first edition. *For details see Unknown Author. (1889). Trübner's record: A Journal Devoted to the Literature of the East: with Notes and Lists of Current American, European and Colonial Publications*. London: Clarendon Press, p. 135.

posthumously²³). The book presents a vast collection of construction details (drawings and calculation) and plans of various building types, residential and public.

This book comprises of two parts, Part I (Text) has general information about population and areas, use of Mathematics and surveying, conversion tables and calculations for designing various building components and chapters on sanitation, mechanical and electrical engineering (similar to *Architectural Graphic Standards*). Part II (Drawings) is like a pattern book, with details of various building components and decoration, sample plans of houses, and sample building plans for hospitals, educational buildings, mills, railways, factories and Civil and Military buildings as well as water works and canal works. This book was intended for Engineers and members of Public Works Department as well as laymen who might need some occasional help and guidance in Engineering and Buildings²⁴.

Plans for the single family dwellings constitute an important part of this book. These have been categorised as “House of European fashion”²⁵ and “Houses of Indian fashion”²⁶ with more than 100 plans of the former and some fifteen plans of the latter. While there is no written description accompanied to explain the reason of this categorization, the drawings are quite self-explanatory as both the styles have marked differences.

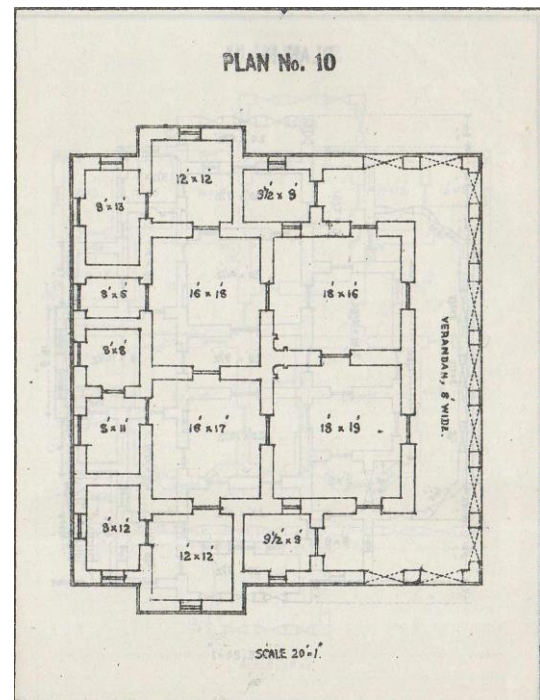
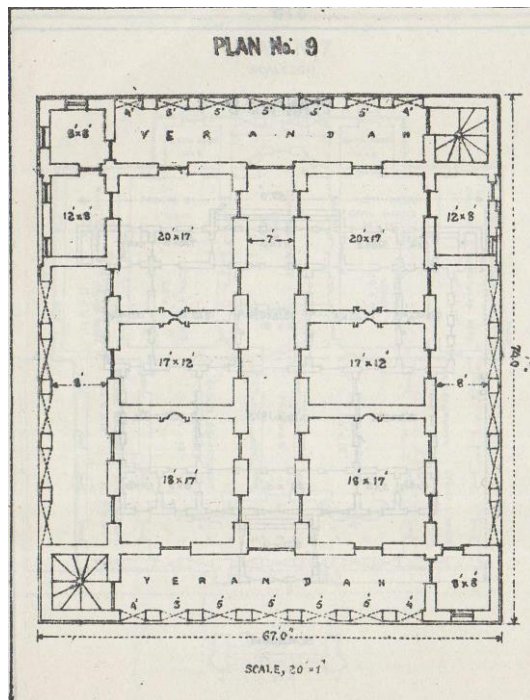
The Houses of European fashion included the earlier bungalow plans in the British India, 8-2, as well as many plans (presumably) from western pattern books, 8-3. These constructed area of these houses generally comprised of three main parts; the main buildings, kitchen and outhouses; which were laid in a vast site demarcated by a hedge of bushes or a low height compound wall, 8-4. The main building was placed somewhere in the centre of the site and enjoyed views and ventilation from the surrounding lawn spaces, 8-4

²³ Prasad, J. (1927). Foreword in Sir Ganga Ram's *Pocket Book of Engineering*. Lahore: Civil and Military Gazette Press.

²⁴ Ram, G. (1927). *Pocket Book of Civil Engineering*. no pagination for this section.

²⁵ Ram, G. (1927). *Pocket Book of Civil Engineering*. pp. 369-491.

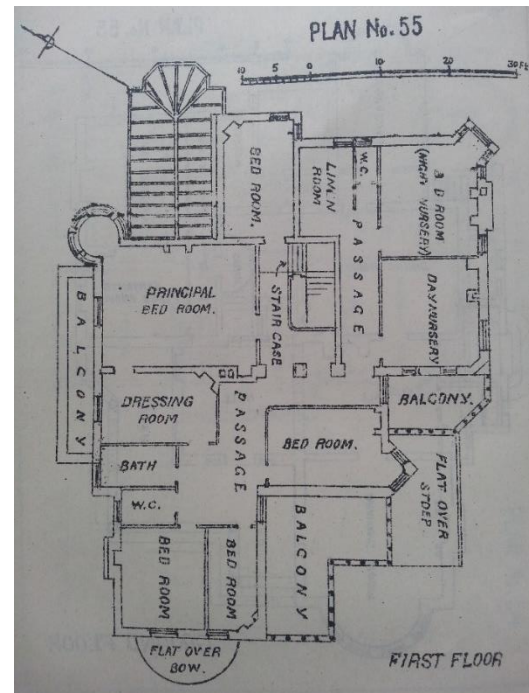
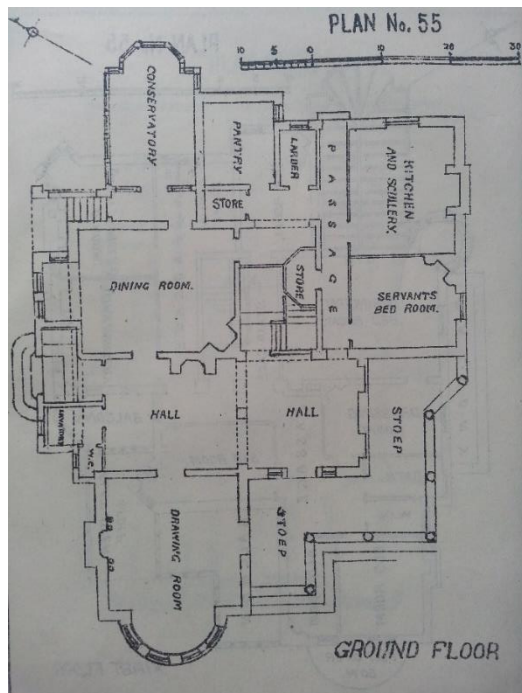
²⁶ Ram, G. (1927). *Pocket Book of Civil Engineering*. pp. 497-511.



Drawn by: Unknown

Plan No. 9 and 10, Houses of European Fashion, Pocket Book of Engineering (1927)
c. 1888.

8-2 Single storey European Bungalows, from Ganga Ram's *Pocket Book of Engineering*

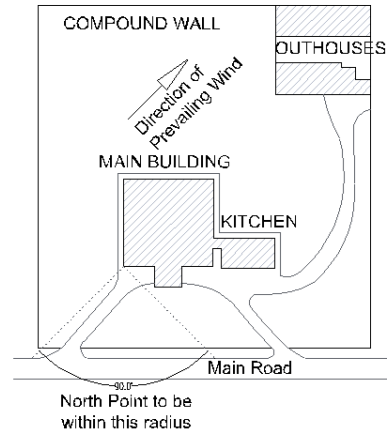
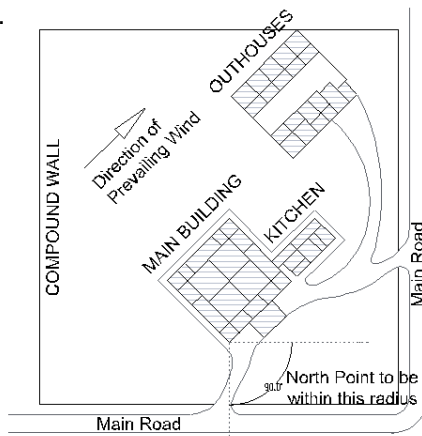


Drawn by: Unknown

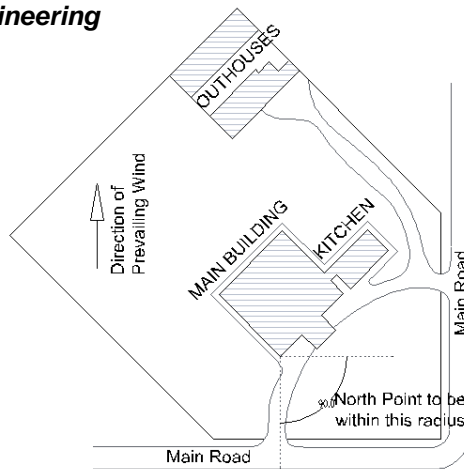
Plan No. 55 Houses of European Fashion, Pocket Book of Engineering (1927)

c. 1927.

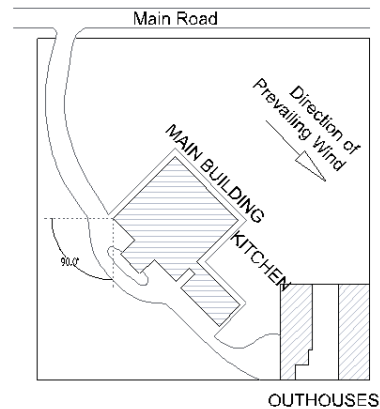
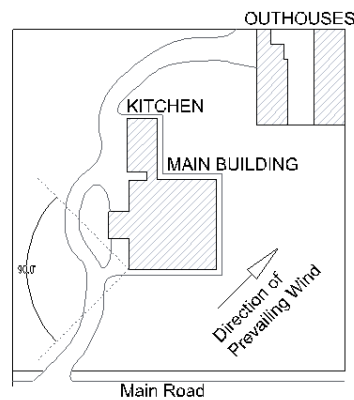
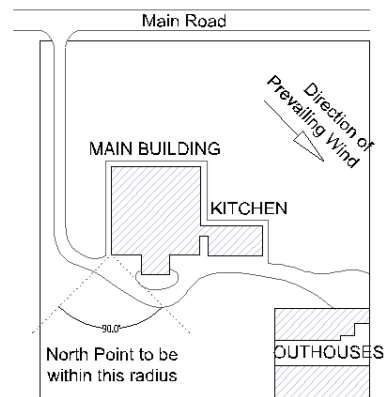
8-3 Double storey



European Engineering



Bungalow, from Ganga Ram's *Pocket Book of*



Drawn by: Shama Anbrine

Pocket Book of Engineering (1927), 365-367.

2013.

8-4 Site Layout Designs for PWD Bungalows

It was located at a considerable distance from the main entrance to the site and was approached by an elaborate passage, 8-4, and a well-defined entrance porch. Kitchen was sometimes part of the main building or attached to the main building through a covered passage, 8-4.

The main building of the house comprised of drawing and dining rooms in the front and bedrooms with attached dressing and bathrooms at the back, 8-2, 8-3. Many smaller rooms on the periphery of the building were used for various storage purposes, scullery, larder and kitchen store. The building exteriors also were covered by verandahs on three or four sides, 8-2.

The outhouses were located at the extreme end of the site and were generally used as servant quarters, 8-4. Earlier bungalows were single storeyed however later bungalows were double storeyed. As observed in 1942 by H.V. Lanchester this approach was adopted in the later Government bungalows when the size of site was reduced due to rise in land prices²⁷.

The Houses of Indian fashion, conversely, comprised of various rooms arranged around a courtyard and the house building spanned two to three storeys, 8-5. These houses were 'cow-mouthed' (narrow fronted) so that a larger number of rooms could be accommodated around the courtyard which was the main source of light and ventilation for these houses²⁸. Being narrow fronted these were accessed through a narrow *deorhi* (entrance passage) from the adjoining street. The front room of the house, *baithak* (traditional drawing cum sitting room for male members), had a separate entrance directly from the street while the *deorhi* opened into the courtyard, 8-5, 8-6. The rooms surrounding the courtyard were of various sizes and usage. However on one side there would be a set of three rooms accessed through a triple arched arcaded verandah from the courtyard, 8-5, 8-6. This has been termed as 'the

²⁷ Lanchester, H.V. (1942). Architecture and Housing in India. *Architectural Design and Construction*. May 1942, 95.

²⁸ Ganga Ram as quoted in Clarke, C.P. (1883). Some Notes on the Domestic Architecture of India. *Journal of the Society of the Arts*. Vol. 31 No. 1594 (JUNE 8, 1883). p. 740.

rule of three' by C. Purdon Clarke as it was a common recurring feature of all houses in Lahore²⁹.

An interesting observation from this book is the development of a native house plan, 8-6. In earlier plans the courtyard was the focus of the house with habitable rooms arranged around it, 8-6 (I). In subsequent plans it has shifted to the rear of the house with the rooms arranged around it in a U shape, 8-6 (II). In the last plans it transformed into an open back-yard with various parts of the house building partly surrounding it, 8-6 (III).

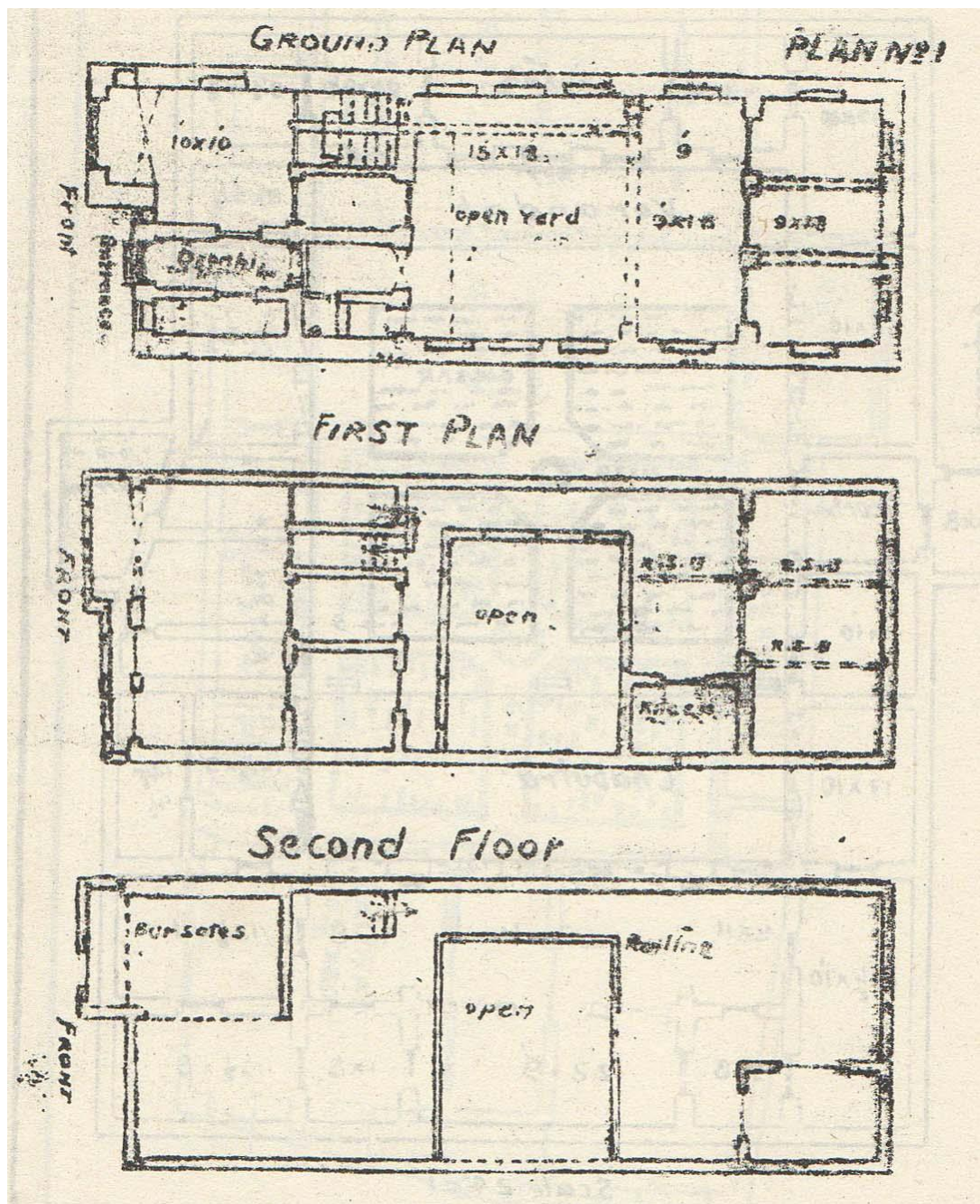
This Pocket Book also contains a detailed segment on the buildings of Model Town Lahore which include black and white photographs of his own house, the Club and A, B and C Class bungalows, as well as a generic plan of the gentlemen's club which was used later by the Society³⁰. The original sources of these drawings are not known as Ganga Ram has given credit to several local government engineers for contributions for non-architectural chapters like Irrigation and Mechanical engineering in the foreword³¹ but there are no credits to the original drawings. There is a fair chance that these house plans were the ones that he came across during his Government service tenure of nearly forty years (1873-1911) as a PWD Engineer in various capacities from Assistant Engineer, Executive Engineer and Superintendent Engineer in the PWD³². Some of these houses might have been designed or documented from original drawings by him and his sub-ordinates.

²⁹ Clarke, C.P. (1883). Some Notes on the Domestic Architecture of India. p. 736.

³⁰ Ram, G. (1927). *Pocket Book of Civil Engineering*. p. 504. Discussed later in Chapter 7.

³¹ Ram, G. (1927). *Pocket Book of Civil Engineering*. p. i-ii.

³² Unknown Author. (1927). Sir Ganga Ram (Obituary). *The Times* [London] 11 July. p.19.

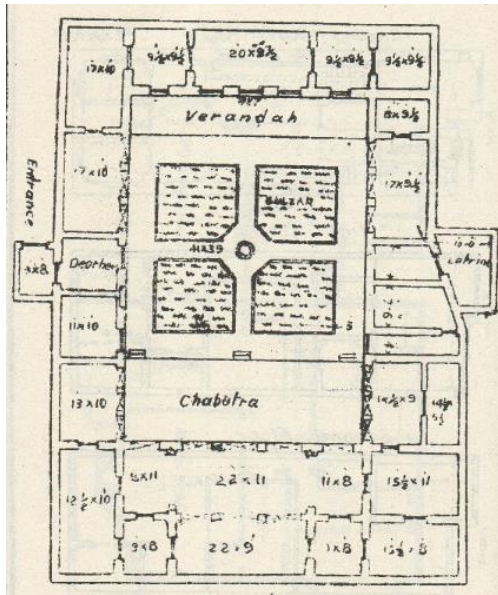


Drawn by: Unknown

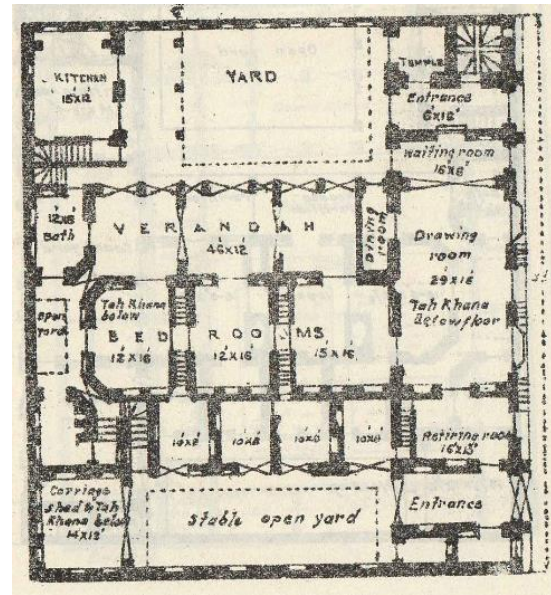
Plan No. 1 Houses of Indian Fashion, Pocket Book of Engineering (1927)

c. 1870.

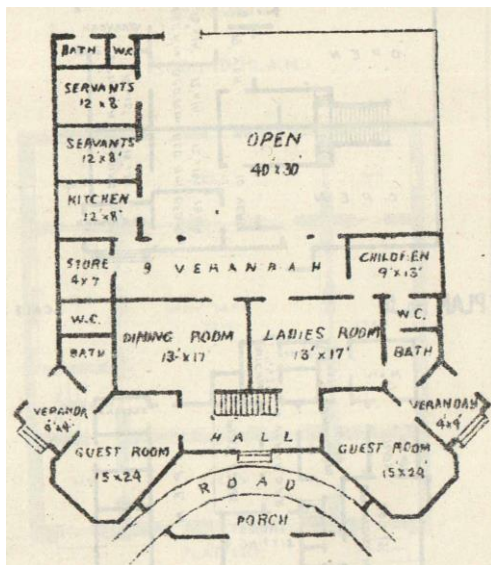
8-5 A triple storey courtyard house



I. A House with Central Courtyard



II. A House with Enclosed Back-yard



III. A House with Open Back-yard

Drawn by: Unknown

Plan No. 2 (Top left) No. 7 (Top right) No. 8 (Bottom left) Houses of Indian Fashion, Pocket Book of Engineering (1927)

c. between 1870 to 1927

8-6 Development of an Indian House Design

Colonial Bungalows of Lahore



Photographer: Unknown

The British Library

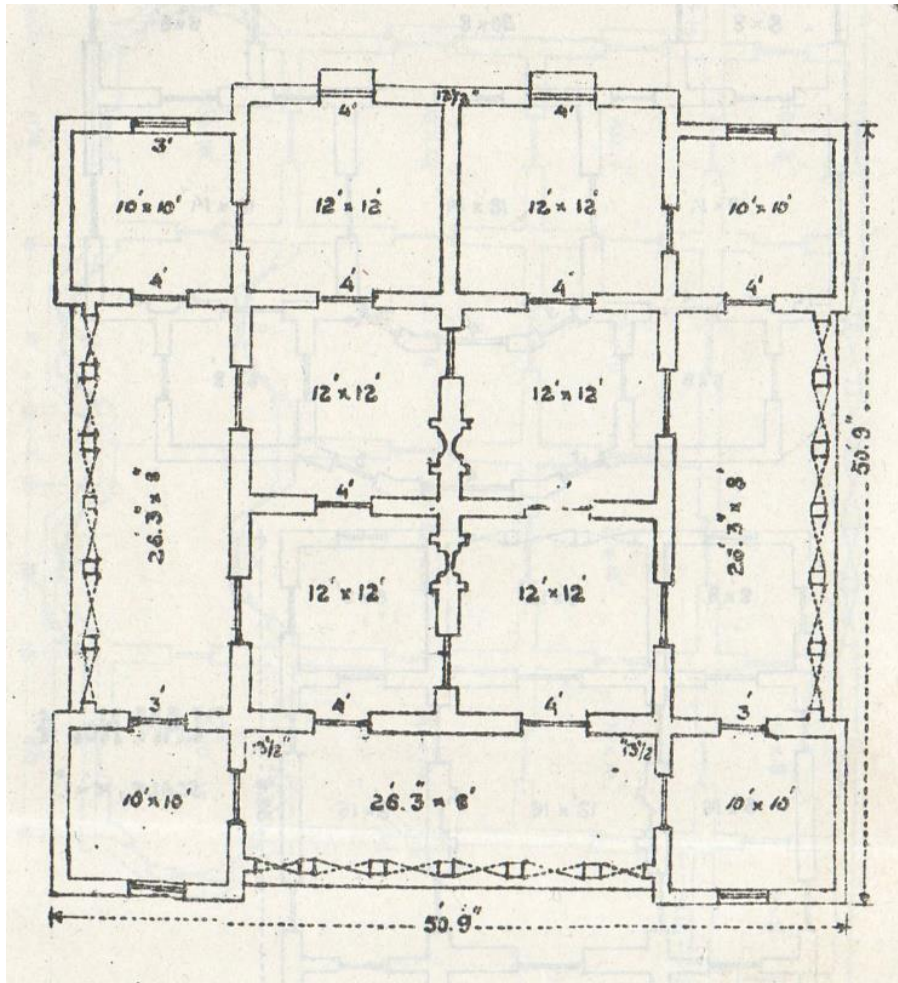
c. 1860/70³³

8-7 A Bungalow in Lahore c. 1860/70

In other parts of the sub-continent, the bungalow might have been a primitive form originating from a Bengali hut, but in Lahore its origins were not as primitive³⁴. Despite this fact, early European bungalows in Lahore have remained unappreciated due to lack of physical evidence. There are a very few pictorial evidences available. From the available sources, it can be seen that most of these houses were set in a vast site and had clustered room in the centre and were surrounded by a running verandah on all sides, 8-7, 8-8, 8-9, 8-10. Earlier bungalows had thatch roofs, 8-7, while the later had flat roofs, 8-9, 8-10.

³³ There are two similar photograph in two different collections at the British Library (1) the 'Bellew Collection: Photograph album of Surgeon-General Henry Walter Bellew' c. 1870(2) 'Brandreth Collection: Views in Simla, Cashmere and the Punjaub' c. 1860." Interestingly the building has been captured from the same angle. Every detail of the building and its landscape remained unchanged except the people in the foreground who betray the difference.

³⁴ Khan, M. (1995). Cultural Transfers: The Repossession of Architectural Form. *Environmental Design: Journal of the Islamic Environmental Design Research Centre* 1-2. p.85.



Drawn by: Unknown

Plan No. 5 Houses of European Fashion, Pocket Book of Engineering (1927)

c. 1870.

8-8 A Typical Bungalow Plan in Punjab

One of the important typologies in this respect is the Kipling's bungalow in Lahore which was based on a prototype design similar to 99 percent of the bungalows in Punjab³⁵. The Kipling's bungalow in Lahore was called 'Bikaner Lodge' by their friends because they had cut down the trees in the garden in the belief that they brought disease³⁶.

³⁵ From The Pall, M. G. (1899). *Fresh Kiplingiana*. New York Times. 09 May.

³⁶ Flaunders, J. (2002). *A Circle of Sisters*. London: Penguin Books. p. 147.

Alice Kipling (Rudyard Kipling's mother) wrote about this house in one of her letters. According to her

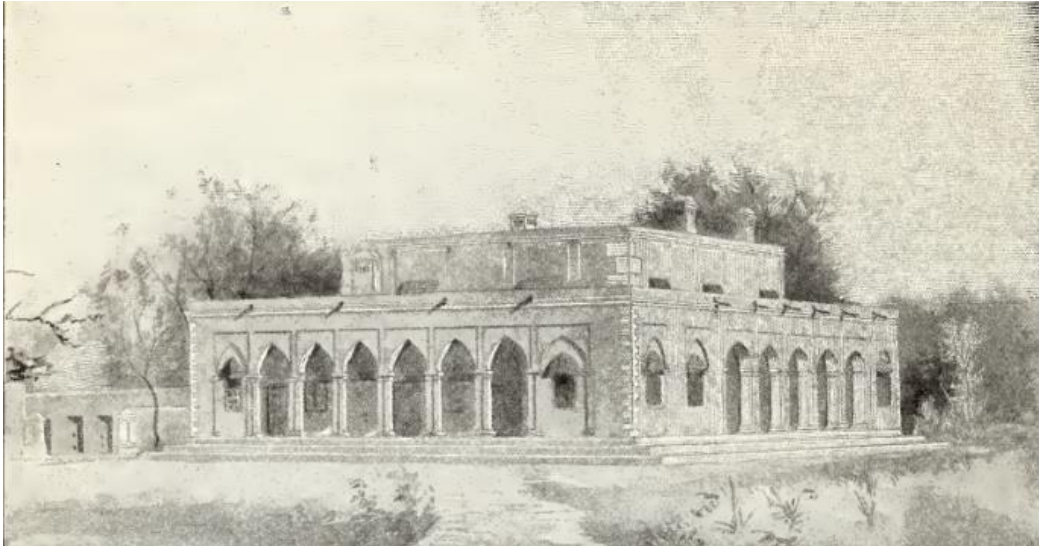
The house itself was a square white bungalow, with four big centre rooms and smaller rooms at the corners. It was surrounded by wide verandahs, which looked out over grounds that had had all their vegetation removed.³⁷

Based on this description the plan of the bungalow (probably) resembled the plan in 8-8. In this type of the bungalow the building generally comprised of two parts according to their usage. The larger building was the habitable areas of the officer and his family; drawing room, dining room, bedrooms; while a separate block was attached which contained the kitchen and allied services, 8-4. This was because kitchens were generally run by the servants and accordingly they were placed near the servant quarters away from the main building of the house as shown below, 8-4.

The exterior of these bungalows resembled a pavilion with a colonnade covering the verandah, 8-9, 8-10. The later bungalows in Lahore, particularly those constructed after the 1900's evolved with modifications in this plan. In Mayo Gardens Lahore, the central block of four major rooms was separated in two blocks with a central passage which acted as a barrier between semi-public (drawing and dining rooms) and private (bedrooms) spaces, 8-11. The building façade, however, did not differ much from the prevalent PWD style³⁸, 8-12, 8-13.

³⁷ Ibid.

³⁸ Kipling, J.L. (1886). Indian Architecture of Today. *The Journal of Indian Art*. Vol. 1. No. 3. (no pagination)

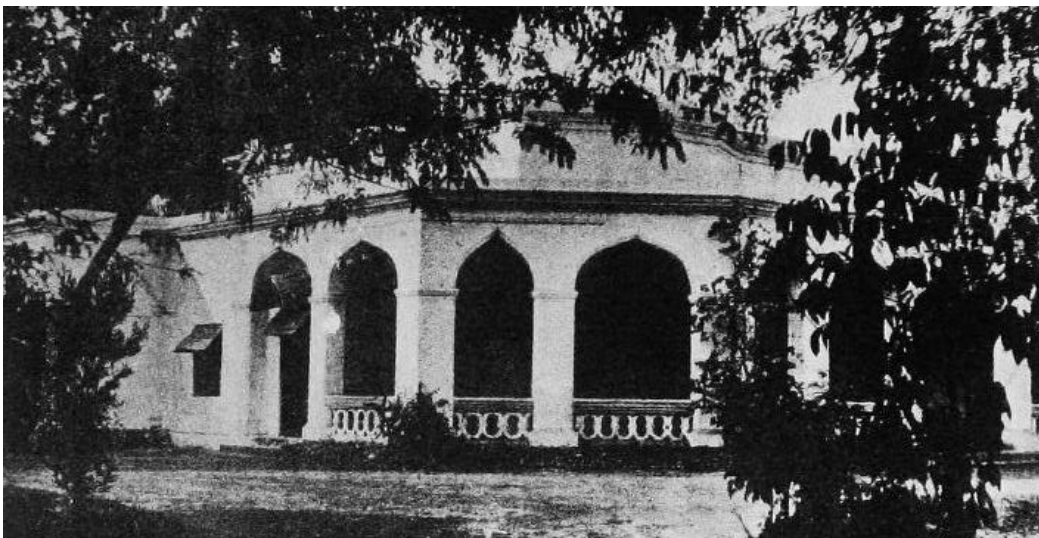


Drawn by: Baga Ram³⁹

McClure's Magazine Vol VII July 1896, 102.

c. 1896.

8-9 Bikaner Lodge (Kipling's Bungalow) in Lahore



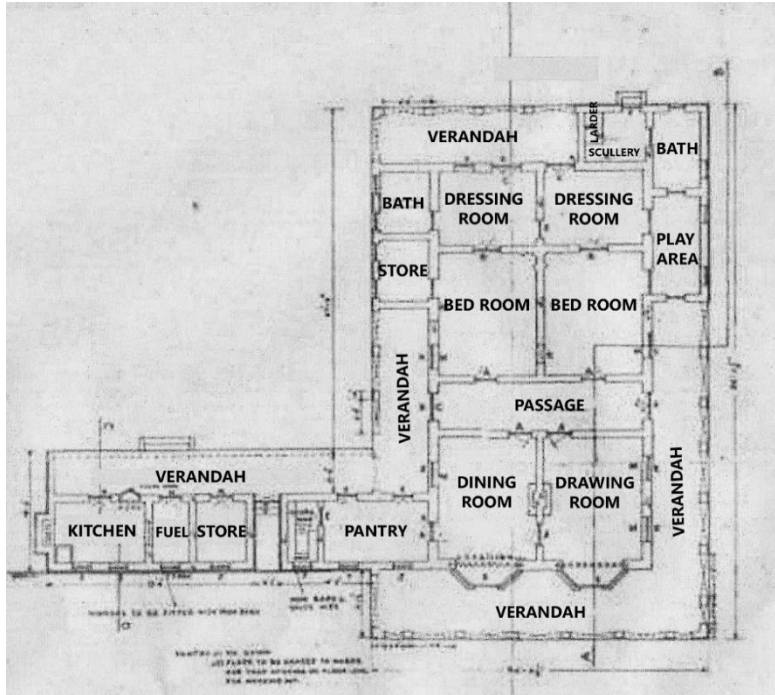
Photograph by: Anna Booth Stratton

Letters From India (1908), 250.

c. 1908.

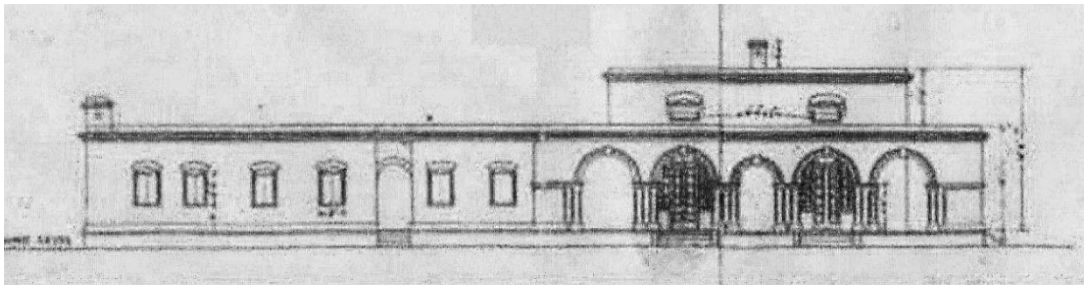
8-10 Alfred William Stratton's Bungalow at Abbott Road Lahore

³⁹ This image from John Lockwood Kipling's personal collection first appeared in Robinson, E. K. (1896). Kipling in India; Reminiscences by the Editor of the Newspaper on Which Kipling Served at Lahore. *McClure's Magazine*. Vol VII .July. p. 102. A similar water colour painting by J. L. Kipling himself is at display at Rudyard Kipling's House turned Museum at Bateman's in East Sussex.



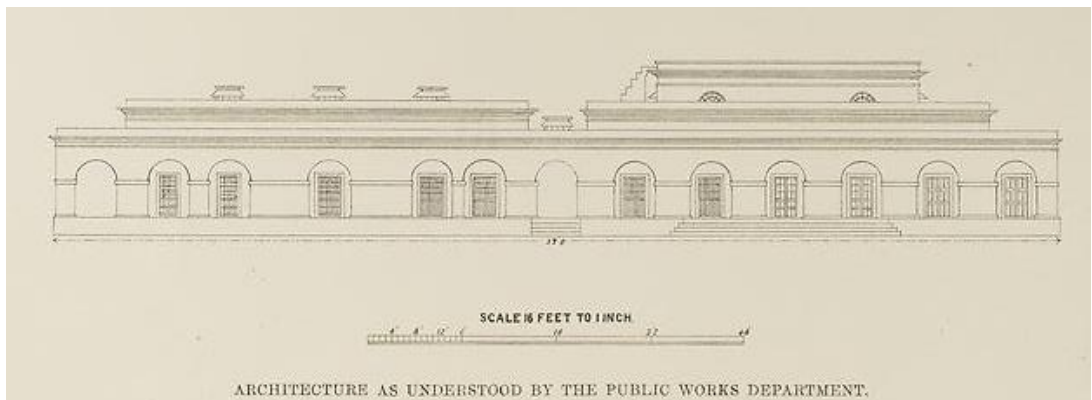
Drawn by: Unknown
(Text superimposed by
Shama Anbrine)
Railway Headquarters
Lahore
c. 1905

8-11 Plan of a Bungalow in Mayo Gardens



Drawn by: Unknown
Railway Headquarters Lahore
c. 1905

8-12 Elevation of a Bungalow in Mayo Gardens



Drawn by: John Lockwood Kipling
The Journal of Indian Art, Vol. 1, No. 3.
c. 1886

8-13 John Lockwood Kipling's Commentary on PWD Architecture



Photographer: Unknown

F.A. Bhatti

c. 1900

8-14 *Diwan-e-Khas* (The Mughal Royal Court Pavilion) Lahore Fort converted into a Church and Residence



Photographer:

Unknown

c. 1880

8-15 Hazuri Bagh (Sikh Maharaja's guest house) Pavilion

Along with new constructions, many existing pavilions of the city were also used for bungalows, 8-148-15.

House Designs in the Model Town Lahore

The Model Town houses have been regarded as a transformation of house type for the native inhabitants when they underwent a process of rethinking and rebuilding as a result of colonial influences⁴⁰. The house plans of the early period (1929-1937) in the Model Town show interesting deviances from the prototypical colonial bungalow and the traditional houses. The following description explores the various house designs and their salient features.

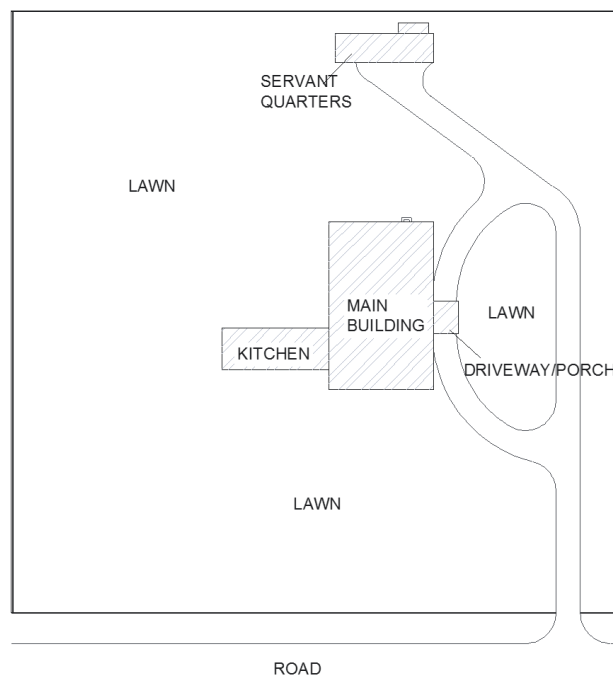
Size of the Houses

Each block of the Model Town contained 156 plots of residential land, each one of which was to contain a detached bungalow. The size of the plot was considerably smaller than the size of a lot for an average colonial bungalow; the maximum plot size in the Model Town was 0.75 acre while an average small-sized colonial bungalow in Lahore covered nearly two acres of site.⁴¹ However as compared to the walled city areas the size of an A class plot in the Town is almost ten-fold, 8-16. In some instances the owners who were capable of buying consecutive plots would buy two and consolidate them. The Society by-laws did not permit these consolidations hence the submitted plans would show two houses with one of them being labelled as 'outbuilding, guest quarters or servant quarters'.⁴² The plot size can be regarded as a major factor in deciding the size of the house built on it. However in many instances, especially in A and B class houses, the size of the constructed house also depended upon the financial implications and many B class houses were of similar size as A class houses, 8-17 .

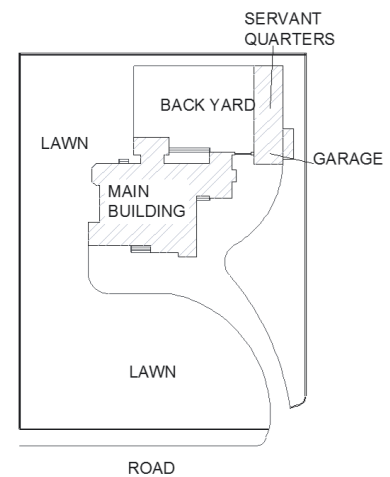
⁴⁰ Glover, W. (2008). *Making Lahore Modern Constructing and Imagining a Colonial City*. Minneapolis: University of Minnesota Press. pp. 159-184.

⁴¹ Discussion with Municipal Corporation Lahore officials, June 2011.

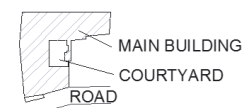
⁴² Khan, M. (1995). *Cultural Transfers: The Repossession of Architectural Form*. p. 93.



I. A Bungalow in Mayo Gardens Lahore



II. A Bungalow in Model Town Lahore



III. A Courtyard House in the Walled City of Lahore



Drawn by: Shama Anbrine

2013.

8-16 A Comparison of Government Bungalow in Mayo Gardens, an A Class House in the Model Town and a Courtyard House in the Walled City of Lahore.

Site Planning of the House Plot

The by-laws of the CMTS required two-thirds of the plot size to be left as garden or open area. However in majority cases the open area was greater than two-thirds most likely probably owing to the financial constraints of building larger houses. Regardless of the plot size, the main building of the house is placed closer to the rear boundary with considerably large open spaces around it. The open space in the front was the lawn, on the sides were the fruit and vegetable gardens whereas on the rear was the back-yard.

A typical front lawn had flower beds and Cyprus trees and on the periphery on both sides of the boundary, usually a wooden fence and a hedge of bushes like *sanatha* or jasmine, where residents displayed exotic flowers and decorative plants to exhibit their aesthetic sense.⁴³ The front facade of many

⁴³ Discussion with Naeem Bari Bhatti Incharge property CMTS June 2011.

houses was covered with creepers like bougainvillea, ivy and money-plant while popular flowers included rose, jasmine, lilies and narcissus.⁴⁴ The area was known for its orchards where all the fruits growing in Punjab could be found and each house would boast a combination of various trees including various types of guava, oranges, mango, and plum along with pomegranate, loquat, *jaman*, papaya, apricots, banana, fig to name a few.⁴⁵ Eucalyptus trees were used extensively to provide shade on the road and in the house garden⁴⁶. Sometimes the owner would adorn the front lawn with a fountain⁴⁷.

The back-yard had some paved area reminiscent of a courtyard attached to a kitchen garden where vegetables and herbs were grown⁸⁻¹⁷. This area due to its proximity with the kitchen was also used for barbeque and other outdoor cooking⁴⁸. Beyond the backyard were the servant quarters or the exterior rooms. This planning offered a resultant house which '*from the front looked like a bungalow and from the rear, a grandfather's house*'⁴⁹.

⁴⁴ Ibid.

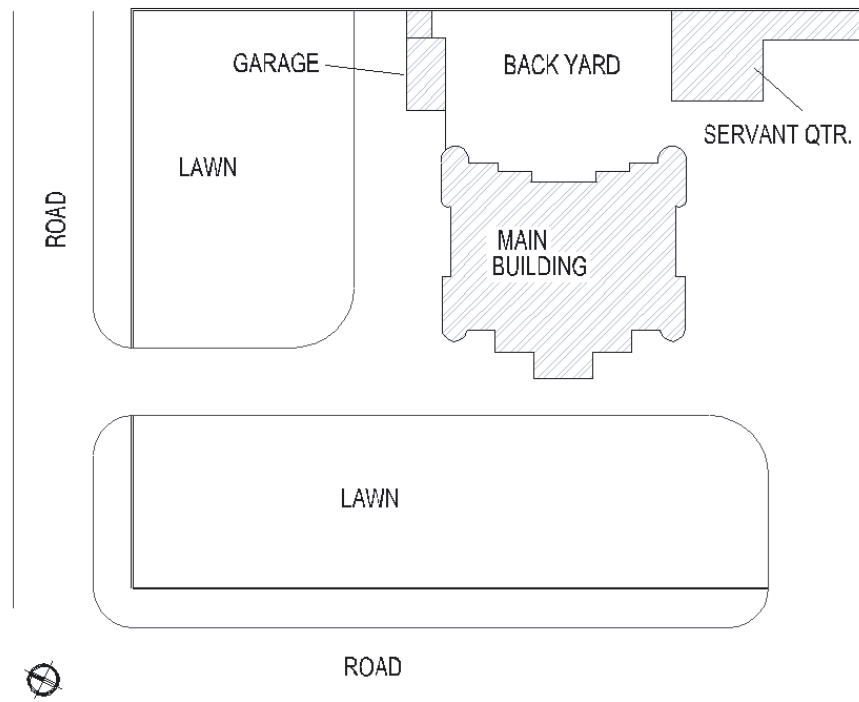
⁴⁵ In some houses the trees are still present, and many old residents that I talked to relate to their childhood activity of stealing fruit from prominent houses during hot summer afternoons when all the elders were having a siesta.

⁴⁶ Discussion with Naeem Bari Bhatti Incharge property CMTS June 2011.

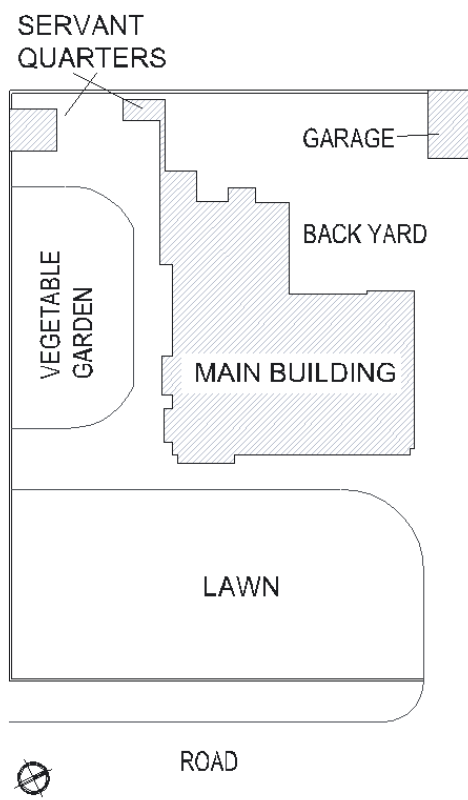
⁴⁷ Ibid.

⁴⁸ Tandon, P. (1968). *Punjabi Century 1857-1947*. p. 237.

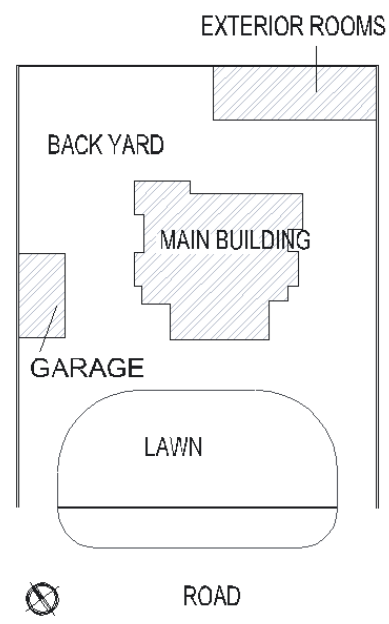
⁴⁹ Tandon, P. (1968). *Punjabi Century 1857-1947*. p. 238.



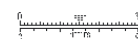
A Class House



B Class House



C Class House



Drawn by: Shama Anbrine
2013.

8-17 A Comparison of A, B and C Class Plot Sizes and Site Plans

House Designs and Drawings

According to the officials at the CMTS, many of these houses had exactly same design, usually when members having two plots wanted their houses to look alike or when friends got inspiration from amongst themselves⁵⁰. A major reason for this being that there was not much difference in the original inspirations, for example, the bungalows were traditional PWD style⁵¹. Hence as described by Prakash Tandon

... were all curiously alike, because they were all patterned on the government bungalows which had been their [the residents'] homes, and the *dak bungalows* [bungalows at hill stations which were allocated to government officers' for shorter tenures for business or leisure purposes] which had been the scenes of so much of their activity.⁵²

In order to understand the typological process of development of these house designs, I have selected nine drawing files, three of each A B and C type, as case studies to examine the different house types and designs which were approved by the CMTS for construction during 1929 to 1937. Unfortunately none of these houses survive now (the last surviving among these houses 44-G was extensively remodelled in 2010-11⁵³) and the drawings are on the verge of extinction due to neglect and biological and microbiological factors (as can be seen from the images that follow each case study).

The A Class houses selected include 5-C, 36-B and 101-A, the B Class Houses include 25-B, 33-B and 72-C and the C Class houses include 44-B, 45-B and 44-G.

The house was accessed from a wooden gate and usually a brick-paved path/driveway.⁵⁴ The earlier residents just painted their house number on the wooden gate, while the later residents started giving their homes poetic

⁵⁰ Discussion with Naeem Bari Bhatti Incharge Property CMTS's office with some of the senior residents of the town, 29 June 2011.

⁵¹ King, A.D. (1984). *Bungalow Production of a Global Culture*. p. 61.

⁵² Tandon, P. (1968). *Punjabi Century 1857-1947*. p. 237.

⁵³ The Project was undertaken by Architects Jawad Ahmed Tahir and Muhammad Saad Khan of Dzynz Architects Lahore who were kind enough to provide these photographs for this study.

⁵⁴ Discussion with Naeem Bari Bhatti Incharge property CMTS June 2011.

names.⁵⁵ A striking similarity in these houses (except one 44-B) is the visually symmetrical façade as seen from the human eye level, 8-198-22, 8-248-268-288-308-358-37. The main entrance to the building is through a large front verandah, e.g. 8-18 or an entrance hall accessed through a portico, 8-20, or a verandah, eg. 8-23. Where the entrance verandahs are used they are usually spanned by three-arch arcade. Two identical rooms are placed on each side of the entrance verandah or hall however the proposed usage varies according to each design. In some instances they are the drawing room and the guest bedroom, while in others they can be the office, sitting room or even the bedrooms.

Each house usually had two verandahs, one at the front while other at the rear. Sometimes there was a third verandah which provided an exclusive entrance to the drawing room or the office, 8-23. The front verandah overlooking the front lawn was usually used for morning tea by the male elders of the house or just to soak in the sun during winter afternoons, and the male visitors were received there⁵⁶. The rear verandah, on the contrary, was a multi-purpose area which functioned as a play area and informal dining area especially for kids so that the lady of the house could keep an eye on them while working in the kitchen, or used as a service area when there were any festive celebrations or parties⁵⁷. Sometimes a covered shelter called *barsati* was also included where the residents could enjoy rain⁵⁸. The habitable rooms were spacious and well-lit. Interior of each house was different but there were some schematic similarities as except some notable houses, majority were furnished on strictly utilitarian concept like a dak bungalow⁵⁹. The drawing room would be the best decorated room in the house which was furnished with 'modern' furniture like a sofa set (usually a triseater with a two seater or two single seats), chairs and wooden tables adorned with tasselled silk net. Floors were carpeted and decorative rugs were used and together with decorative fireplaces and

⁵⁵ Tandon, P. (1968). *Punjabi Century 1857-1947*. p. 236.

⁵⁶ Tandon, P. (1968). *Punjabi Century 1857-1947*. p. 237.

⁵⁷ Ibid.

⁵⁸ Tandon, P. (1968): 238.

⁵⁹ Ibid.

cornices for displaying decoration pieces and wall mounted paintings and framed photographs to add further interest in the room⁶⁰. The furniture and items of decoration were placed symmetrically and their order was not changed despite many individual efforts of the newer residents in the house⁶¹.

Similarly the study would have an elaborate desk and chair with book shelves lined across its walls. The master bedroom would exhibit a 'modern' style bed instead of traditional charpoi or takht. While the rest of the house would have a mixture of furniture ranging from cane seats, takht and charpoi to rocking chair and serving trolleys⁶².

Decorative Elements

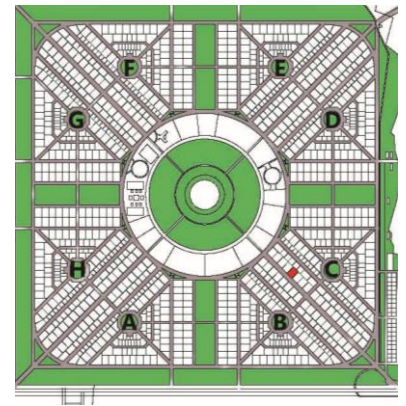
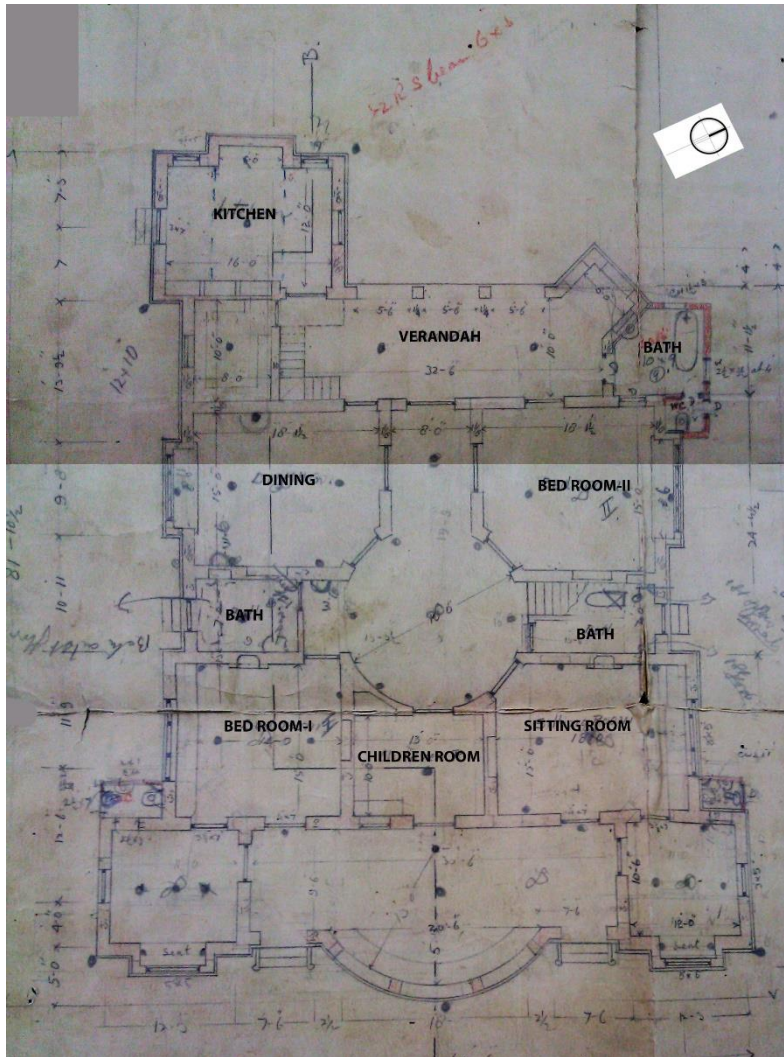
The building exterior was finished in stucco in either white or pale yellow colours or a combination of these colours, 8-38, 8-39, 8-40. One likely reason for the use of these colour can be their reflective properties which would have helped in keeping the building temperature down. Yellow was also considered 'a colour of joy' by the Hindus and is also associated with Vishnu, the maintainer and preserver God, and therefore was it was extensively used by traditional Hindu architects⁶³. The verandahs exhibit porticoes following the rule of three, with three arched openings on the main side, 8-1, 8-38, 8-40. The columns of various designs act as both structural and aesthetic elements. Decorative grillwork, niches, plasterwork, stucco decorative motifs, projected lintels and decorative parapet walls were employed in various degrees to achieve the desired exterior. The building interiors employed subtle surface decorations usually limited to main door, lintel and ceiling levels. One important decorative feature was the fireplace in the drawing room which was doubled as a decorative cornice as its proper usage was limited to a very small time in hot-humid climate conditions of Lahore.

⁶⁰ Ibid.

⁶¹ Tandon narrates the incidences where his Swedish wife used to change the arrangement of the drawing room during the night and in the morning the servants would restore the original symmetrical settings. This practice continued till she gave up. Tandon, P. (1968). *Punjabi Century 1857-1947*. p. 238.

⁶² Discussion with Mr Ghias Ahmed, a resident of Model Town Lahore.

⁶³ Clarke, C.P. (1883). *Some Notes on the Domestic Architecture of India*. p. 745.



Drawn by: Unknown
(text superimposed by
Shama Anbrine)

CMTS Records

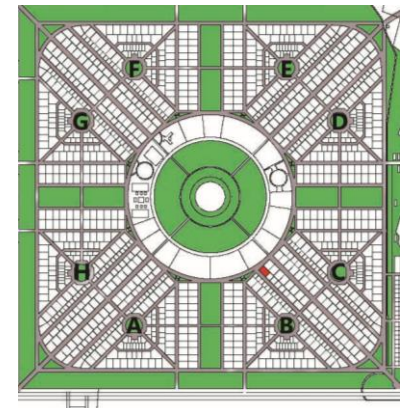
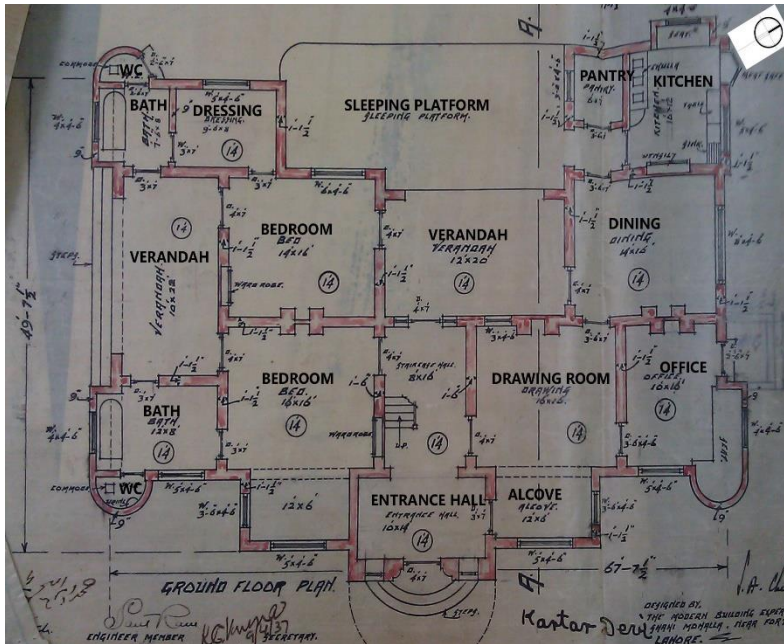
c. 1937.

**8-18 Ground Floor
Plan 5-C**



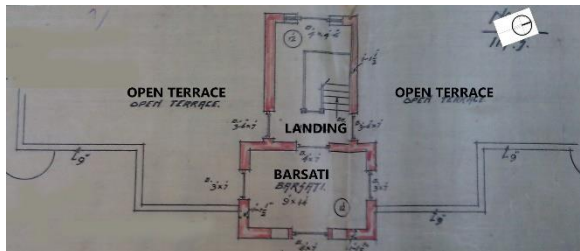
**8-19 Front Elevation 5-
C**

Type	A Class
House No.	5-C
Owner	Lala Lajpat Rai
Architect	Harbans Lal Suri
Year of Construction	1937

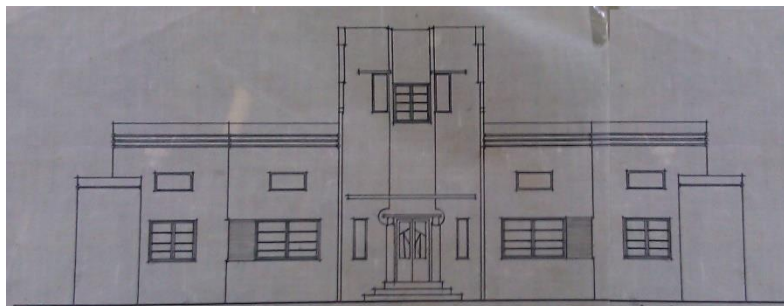


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Shama Anbrine)
CMTS Records
c. 1937.

8-20 Ground Floor Plan 36-B

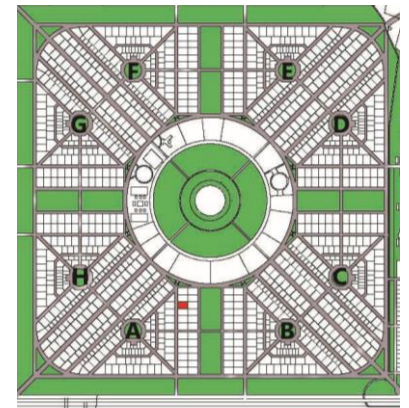
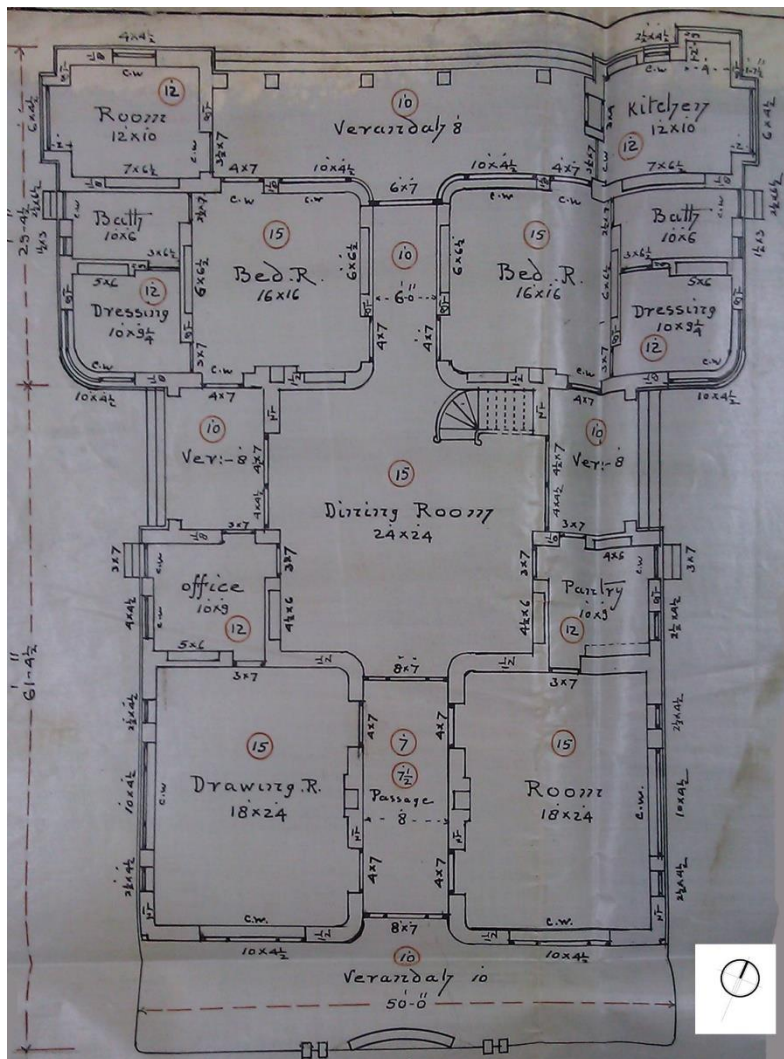


8-21 First Floor Plan 36-B



8-22 Front Elevation
36-B

Type	A Class
House No.	36-B
Owner	Kartar Devi-V.S.Puri
Architect	I. A. Chishty
Year of Construction	1937



Drawn by: Unknown
(text superimposed by
Shama Anbrine)

CMTS Records

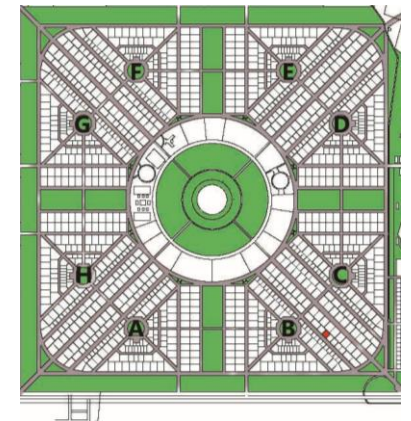
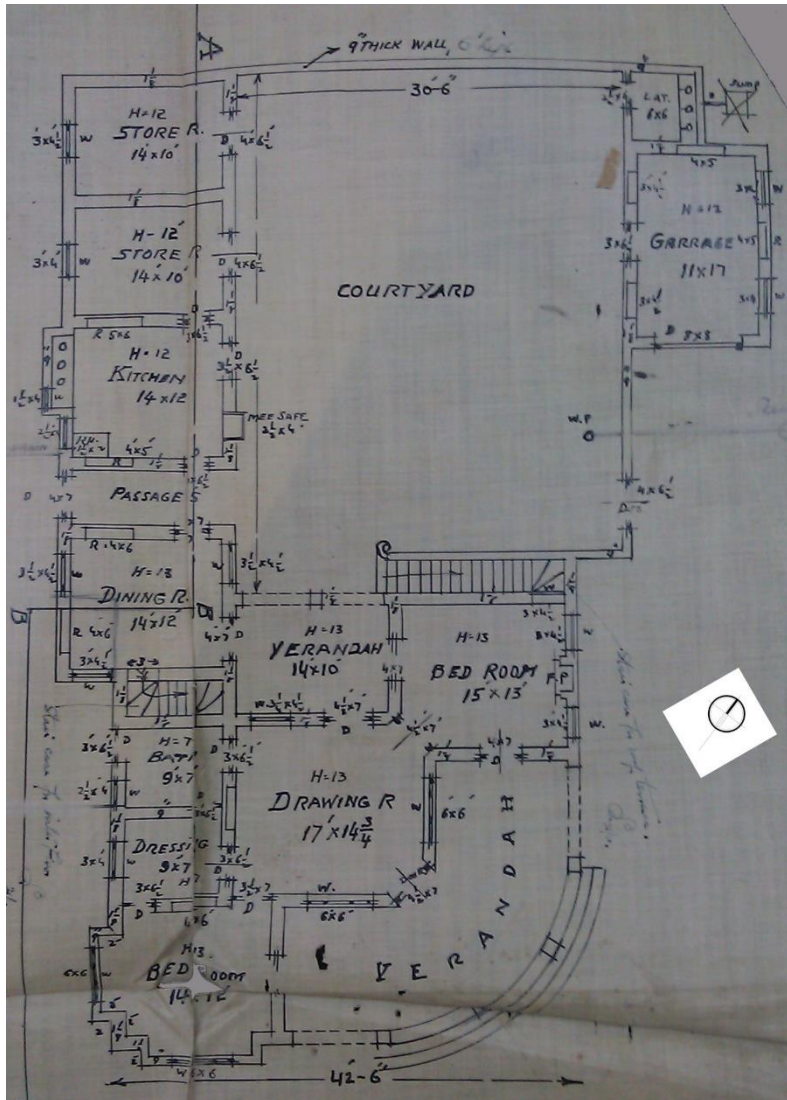
c. 1937.

**8-23 Ground Floor Plan
101-A**



**8-24 Front Elevation
101-A**

Type	A Class
House No.	101-A
Owner	Syed Bashir Hyder
Architect	Chiranjil Lal Sharma
Year of Construction	1937

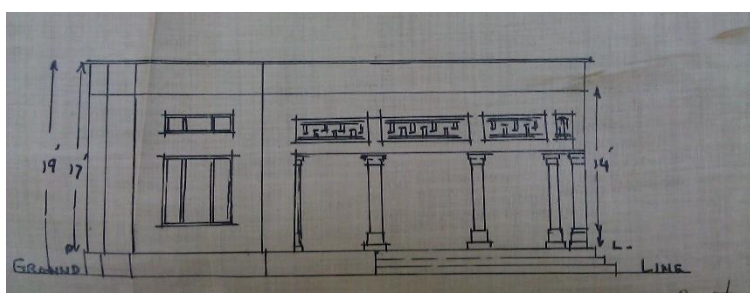


Drawn by: Unknown
(text superimposed by
Shama Anbrine)

CMTS Records

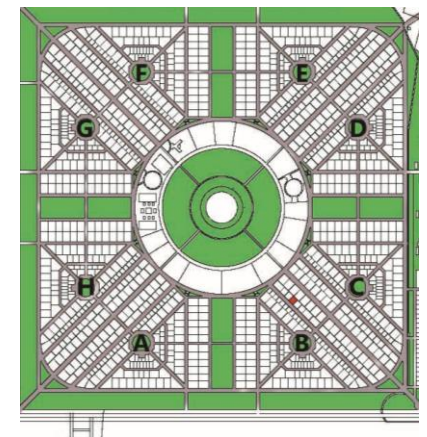
c. 1937.

8-25 Ground Floor
Plan 25-B



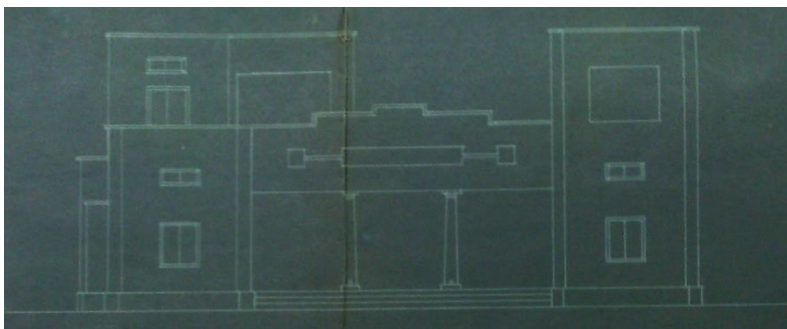
8-26 Front Elevation 25-B

Type	B Class
House No.	25-B
Owner	S. Niranjana Singh
Architect	Not Known
Year of Construction	1936



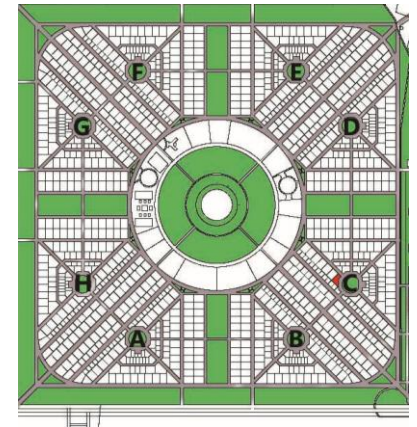
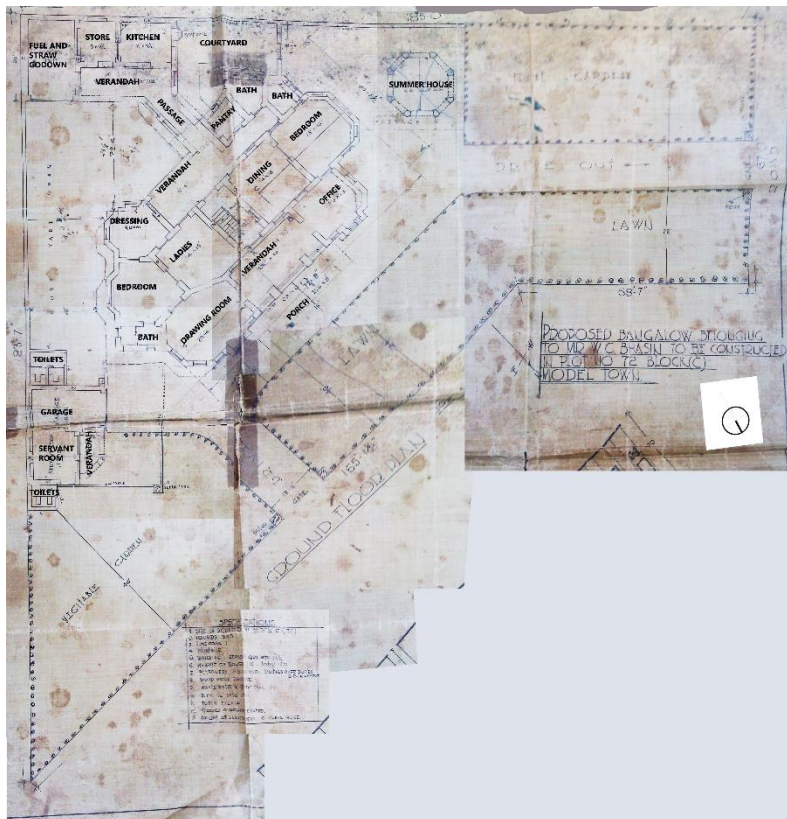
Drawn by: Unknown
(text superimposed by
Shama Anbrine)
CMTS Records
c. 1937.

**8-27 Ground Floor
Plan 33-B**



**8-28 Front Elevation
33-B**

Type	B Class
House No.	33-B
Owner	L. Malawa
Architect	Chiranji Lal Sharma
Year of Construction	1937



Drawn by: Unknown
(text superimposed by
Shama Anbrine)

CMTS Records
c. 1937.

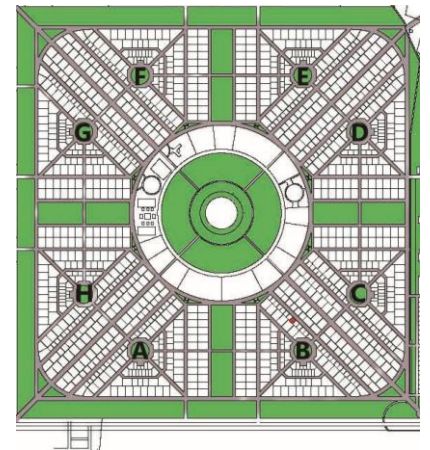
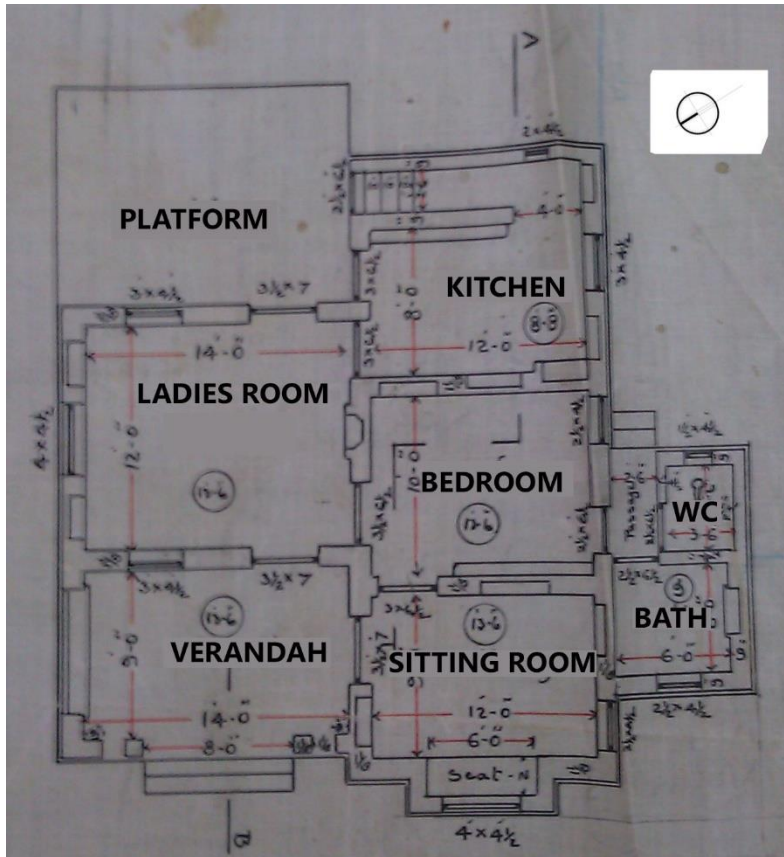
**8-29 Ground Floor
Plan 72-C**



8-30 Front Elevation 72-C

8-31 Elevation of the Summer House 72-C

Type	B Class
House No.	72-C
Owner	W.C. Bhasin
Architect	Harbans Lal Suri
Year of Construction	1937



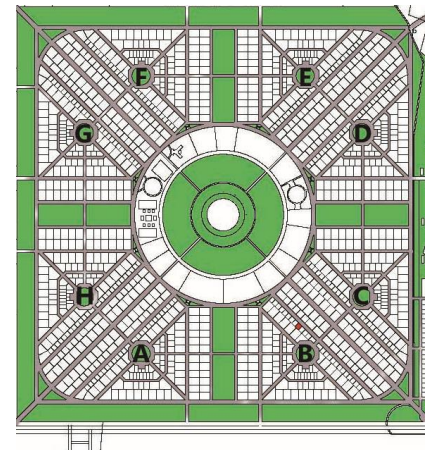
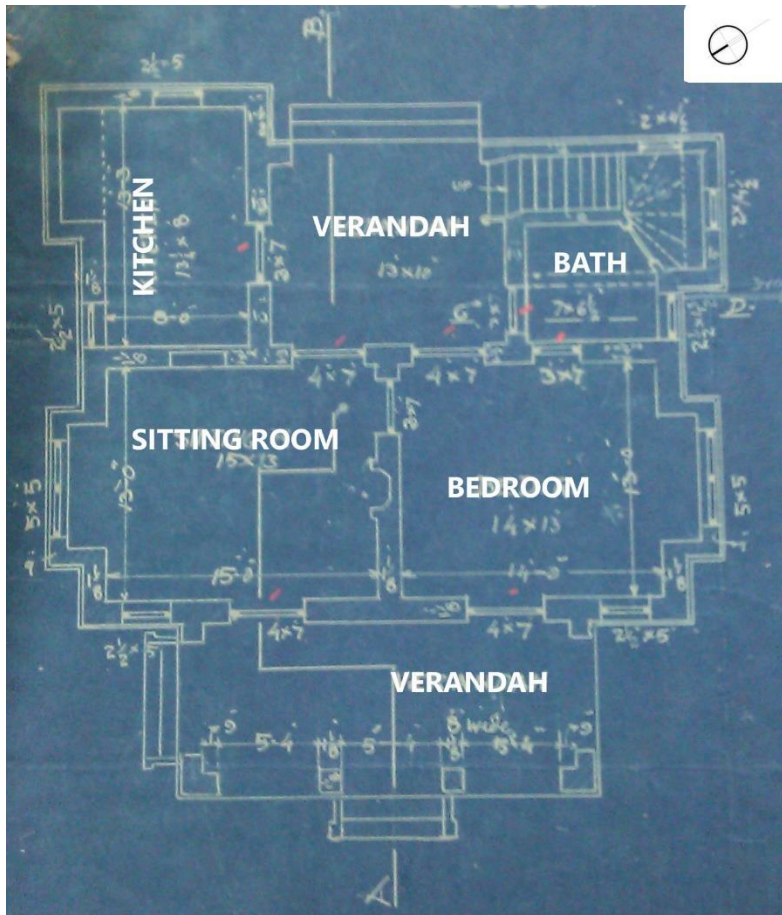
Drawn by: Unknown
(text superimposed by
Shama Anbrine)
CMTS Records
c. 1929.

**8-32 Ground Floor
Plan 44-B**



**8-33 Front Elevation
44-B**

Type	C Class
House No.	44-B
Owner	Radha Rani
Architect	M.C.Khanna
Year of Construction	1929



Drawn by: Unknown
(text superimposed by
Shama Anbrine)
CMTS Records

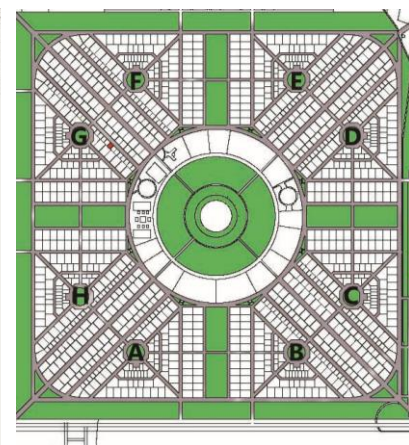
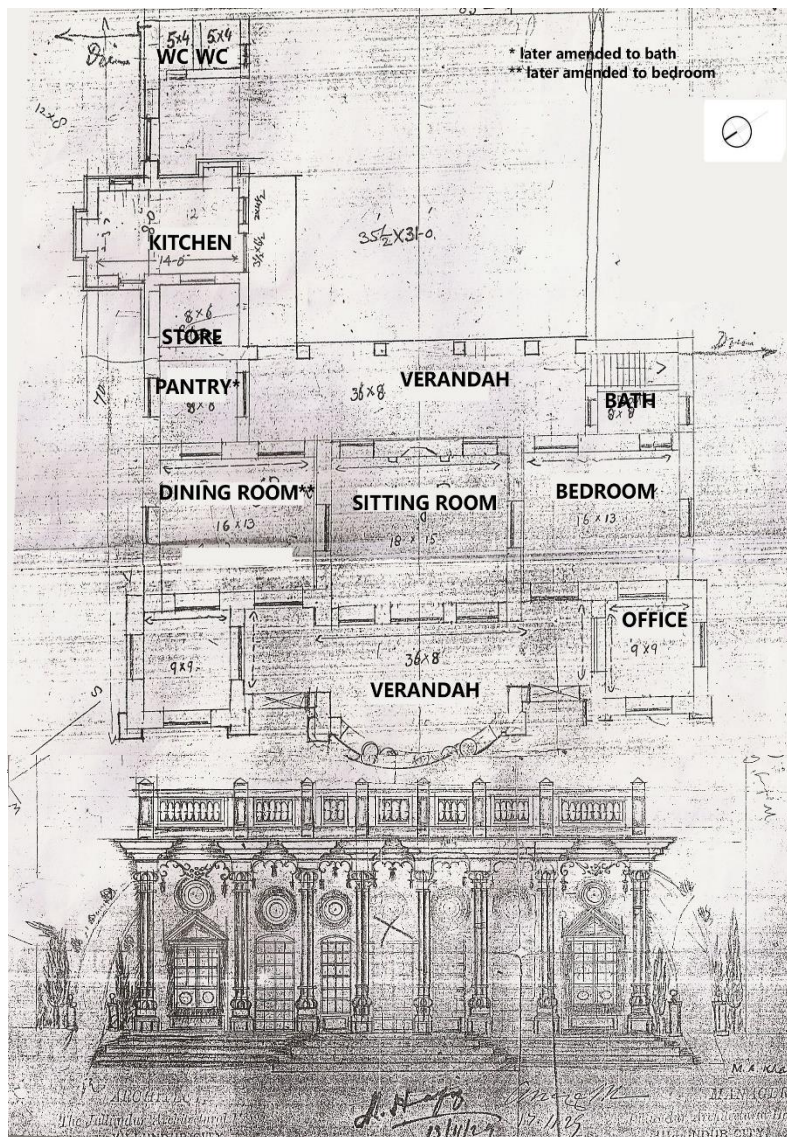
1926.

**8-34 Ground Floor
Plan 45-B**



**8-35 Front Elevation
45-B**

Type	C Class
House No.	45-B
Owner	Maryam Bakhtawar
Architect	M.C.Khanna
Year of Construction	1926



Drawn by: Unknown
(text superimposed by
Shama Anbrine)
Jawad Ahmed Tahir
c. 1929
**8-36 Ground Floor
Plan 44-G**

**8-37 Front Elevation
44-G**

Type	C Class
House No.	44-G
Owner	Hafeez Jullundhri
Architect	Not Known
Year of Construction	1929



Photograph by: Shama
Anbrine
2012.

8-38 Front Verandah 4-G



Photograph by: Shama
Anbrine
2012.

8-39 Front Verandah 104-H



Photograph by: Shama
Anbrine
2012.

8-40 Side View 36-D



Photograph by: Shama Anbrine
2012.

8-41 Decorative Elements 4-G



Photograph by: Jawad Ahmed Tahir
Dzynz Architects
2010.

8-42 Decorative Elements 44-G



Photographs by: Shama Anbrine
2012.

8-43 Decorative Details 80-H

Top: Part façade

Bottom Left: Detail of a column

Bottom right: Entrance pillar



Photographs by:
Shama Anbrine
2012.

**8-44 Detail over
internal entrance 4-G**



Photograph by: Jawad
Ahmed Tahir
Dzynz Architects
2010.

**8-45 Internal View of
The Verandah 44-G**



Photograph by: Jawad Ahmed Tahir
Dzynz Architects
2010.

8-46 Fireplace 44-G



Photograph by: Jawad Ahmed Tahir

Dzynz Architects

2010.

8-47 Interior of a Room 44-G



Photograph by: Jawad Ahmed Tahir

Dzynz Architects

2010.

8-48 Decoration in Ceiling and *Roshanda'n* (Skylight cum ventilator) 44-G

Building Materials and Construction Specifications

The building is constructed of 18" and 27" thick brick walls with lime mortar. The bricks used for construction are standard British bricks measuring 9" x 4 ½" x 3". The ceilings were usually 12' high. Hence these buildings were very cool during summers, consequently very cold in winters when fireplaces were not being used⁶⁴.

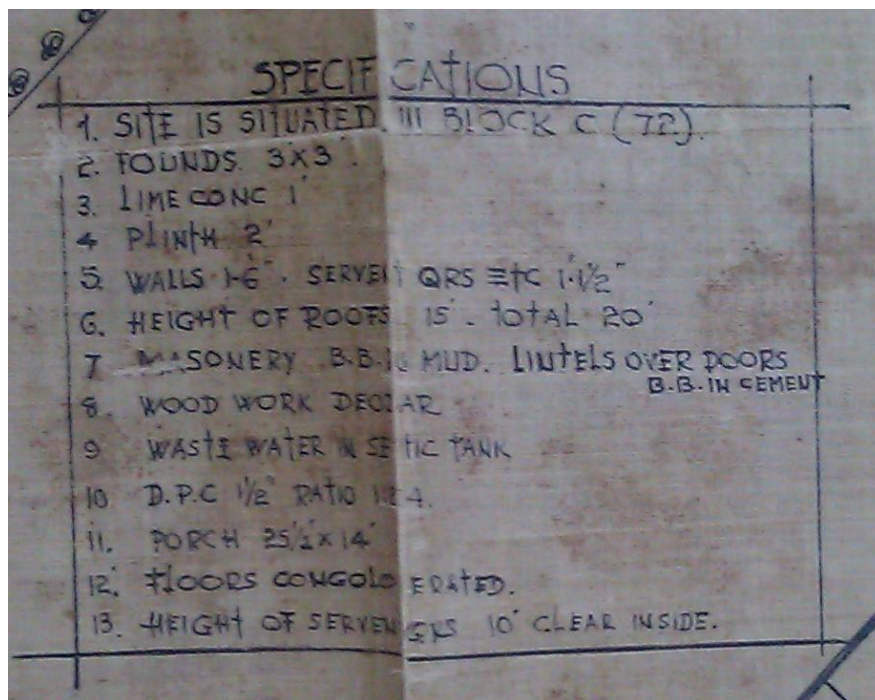
Foundations were constructed on a base of a mixture of lime concrete which used bricks ballast as aggregate. Upto plinth level the structure was constructed of 9 inches burnt brick in mud plaster. The superstructure walls were constructed of burnt brick with mud filler and finished with burnt brick in cement mortar. Pointing and plastering was used for finishing the surface of the walls.

All doors and windows (and the joinery) were constructed of either *deodar* (Himalayan cedar) or *chir* (pine) wood.

Roof was constructed of chir wood beams and battens which were covered with roof tiles and corrugated galvanized iron sheets.

Floor was constructed of Portland cement concrete in the habitable rooms, kitchen and verandah and flat brick in servants' quarters and the garage. In some places the Portland cement was mixed with *surkhi* (brick powder) to give a distinctive red colour to the floor.

⁶⁴ Tandon, P. (1968). *Punjabi Century 1857-1947*. p. 238.

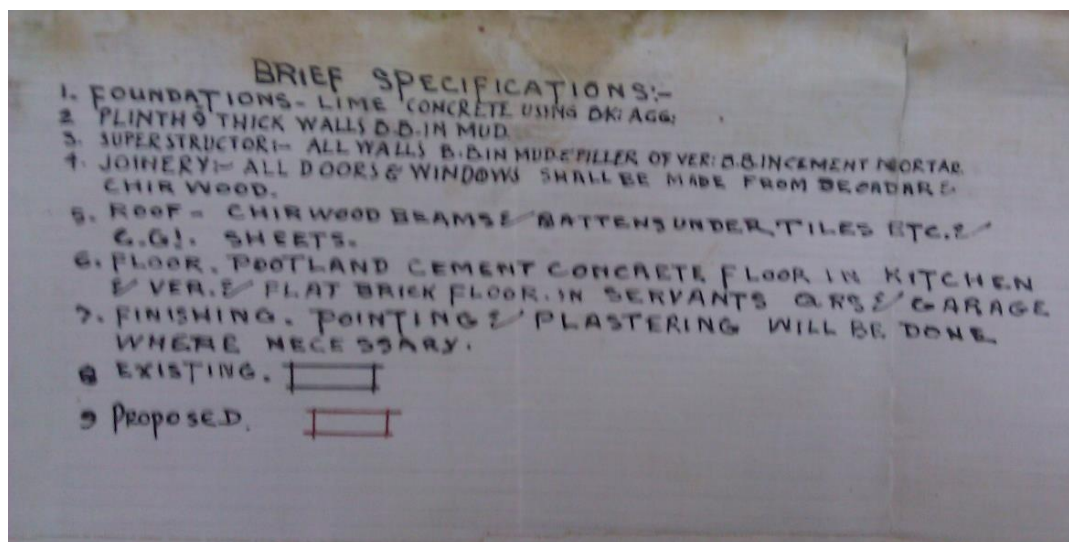


Drawn by: Unknown

Drawing File of House No. 72-C Model Town

c. 1937.

8-49 Specification table

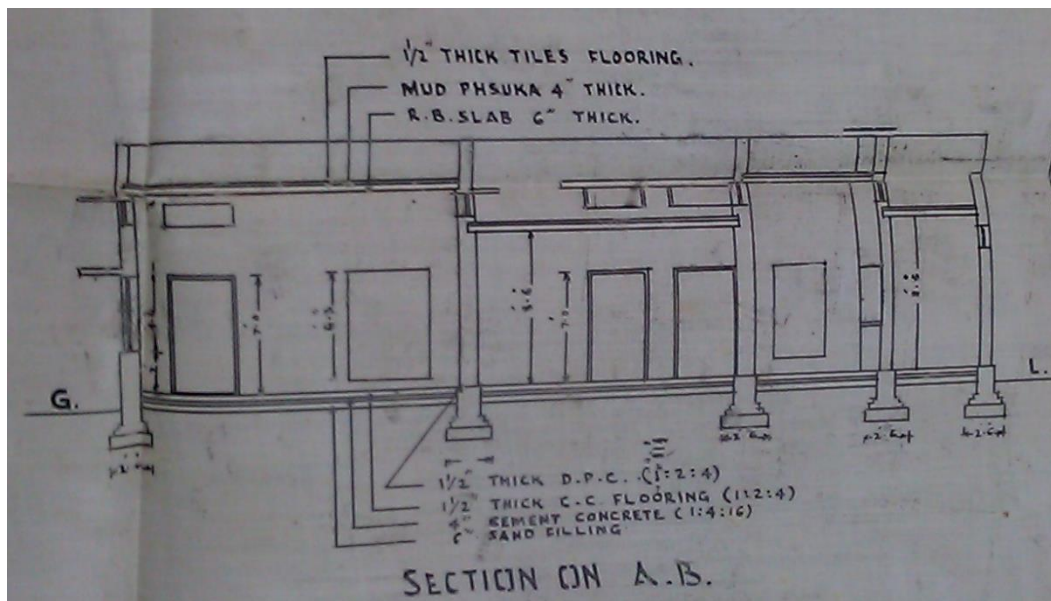


Drawn by: Unknown

Drawing File House No. 25-B Model Town

c. 1937.

8-50 Specification list



Drawn by: Unknown

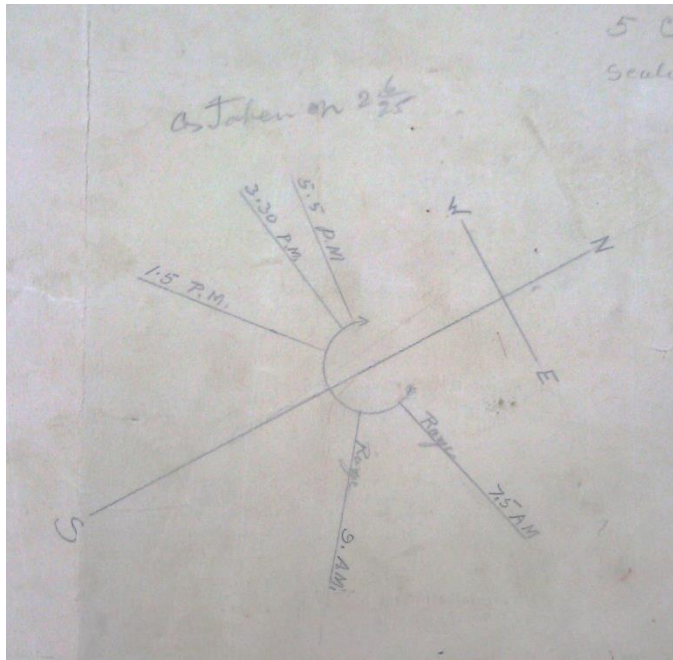
Drawing File of House No. 36-B Model Town

c. 1937

8-51 A Section through the House

Climatic Considerations in Design

Lahore lies in a hot-humid climatic zone as and throughout the year the temperature varies from above 50 degrees during the peak summers to below 0 degrees during the extreme winter months. Hence the climatic considerations were an important part of the house design in the Town as evident from the sun path and wind direction dials appearing on all drawings, 8-52, 8-53.

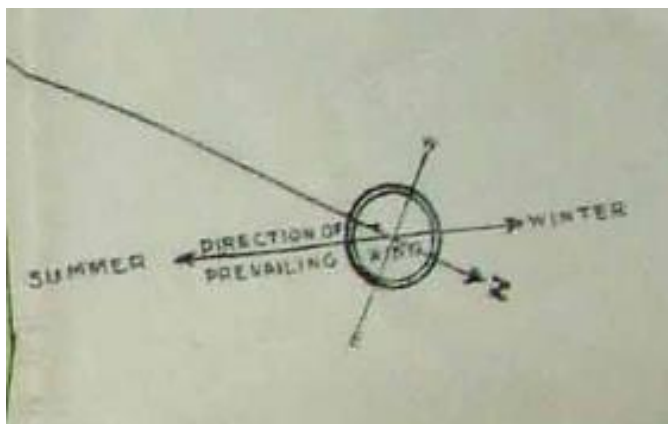


Drawn by: Unknown

Drawing File House No. 5-C Model Town Lahore

c. 1937.

8-52 Sun Path Diagram as taken on 2 June 1925



Drawn by: Unknown

Master Plan of Model Town Lahore

c. 1937.

8-53 Wind Direction



Photograph by: Jawad Ahmed Tahir

Dzynz Architects

2010.

8-54 Internal View of the Verandah showing the Doors, Windows and Roshanda'n 44-G

All the houses were designed with the concept of cross-ventilation in mind (almost literally) as the door and window openings were placed in direct alignment to each other hence opening all doors and windows would ensure the air circulation throughout the house. The external doors and windows were usually double-layered. The layer opening into the exterior was constructed of a mesh within a wooden frame while the layer opening into the interior was composed of solid wood in case of doors and glass set in wooden frame for windows. This strategy ensured that during the summers air could circulate within the building by keeping the interior layer open which prevented flies from entering the building. In winters the interior layer could be closed to prevent air circulation. The verandahs protected the doors and windows from direct sunlight. In the absence of verandahs projected lintels which served as vertical louvers were used as sun shading devices. The buildings usually had high ceilings and to ensure removal of hot air roshanda'n (skylight cum ventilator) were used near the ceilings.

Towards an 'Indian Bungalow'

The most significant factor that influenced the design of houses in Model town Lahore was the lifestyle of its middle class indigenous occupants which differed from that of their British counterparts. British middle class emerged after the industrial revolution due to economic and technological changes. However the Indian middle class emerged as a consequence of changes in public administration and law which paved a path for the local population to excel by opting for learned professions. This basic difference significantly influenced the process of 'westernisation'. In order to be accepted into higher levels in public administration and law they had to prove their proficiency in English language, western etiquettes of dress, behaviour and lifestyle as well as willingness to adapt to westernised environments and equipment.⁶⁵ This was especially true for men in their public lives as they progressed higher in the service ranks. However when they returned back to their homes most of them would revert back to the comfort of their native dress and language even if they did not abandon the table manners and socialising skills.

Accordingly they attempted westernising their families, and unlike the common perception which depicts subdued Indian women⁶⁶, many of them particularly encouraged their wives in this matter. However, women proved to be more resilient to this change. One illustrious example has been narrated by Prakash Tandon about how his father and mother approached this matter as:

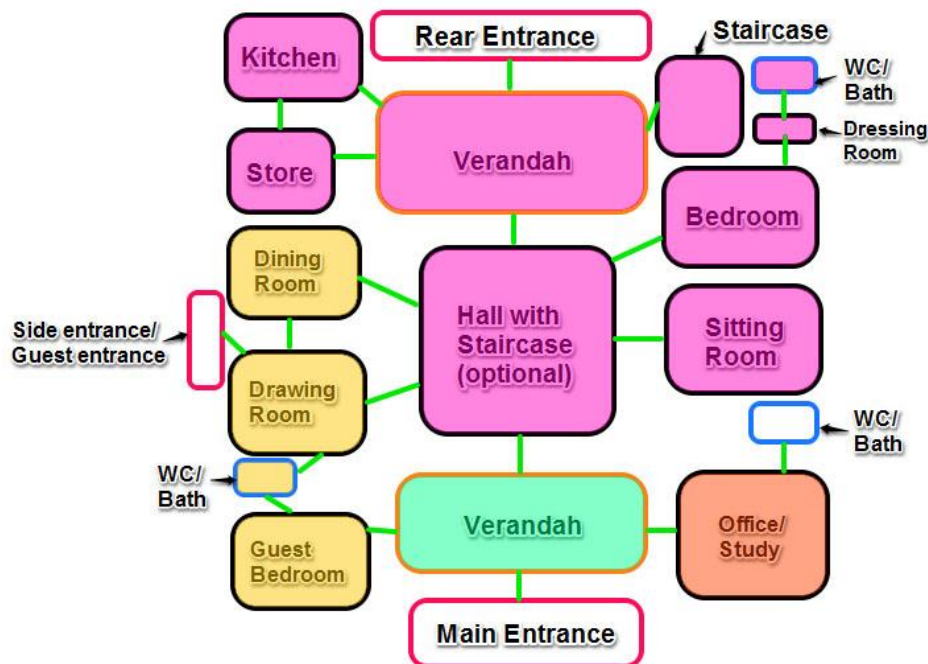
After the short experiment at westernising her father must have left mother alone, but she kept pace with his development, though at her own distance and without letting go anything she cherished. Generally speaking, throughout the process of change, our women showed enough attachment to tradition to prevent the change from swamping old values. Our fathers changed rapidly, our mothers slowly, and between them my generation managed to learn the new without entirely forgetting the old.⁶⁷

⁶⁵ King, A.D. (1984). p. 56.

⁶⁶ Nair, J. (1990). Uncovering the Zenana: Visions of Indian Womanhood in Englishwomen's Writings, 1813-1940. *Journal of Women's History*, Volume 2, Number 1, Spring 1990, pp. 8-34

⁶⁷ Tandon, P. (1968). p. 38.

This dualistic character within the family is clearly exhibited in utilisation of spaces within the house where there are distinct guest and family zones.



■ Semi-Public Zone

■ Patriarch zone

■ Guest Zone

■ Family Zone

Drawn by: Shama Anbrine
2014.

8-55 Flow of spaces and connections in a typical Model Town house (Ground Floor)

The guest zone included the drawing and dining rooms and a guest room with attached WC and bathroom. These rooms were approached through a separate side-entrance and were furnished in 'strictly utilitarian' western style as described by Tandon.

The furnishings, apart from a few sophisticated houses, were also reminiscent of the dak bungalows and strictly utilitarian. The only touch of luxury in our drawing-room was a big Persian carpet, commemorating father's Kashmir holiday. Round this carpet were arranged in precise symmetry two sofas and

six chairs and in front of each sofa was a table adorned with tasselled silk net... The pictures consisted of my brother's wedding. Ravi Varma's Shakuntala, and the Stages of Life...⁶⁸

This was perhaps a common characteristic throughout the middle-class Indian and Anglo-Indian families where the furniture resembled their British counterparts. The rooms would be adorned with sofas, armchairs, coffee tables, curtains, wall hung pictures and lamps in a fashion similar to Victorian houses.

Similarly, like a Victorian house, every habitable room had a fireplace⁶⁹ which was rarely used for its actual purpose of heating the room due to the hot climate. Instead it acted as a focal point with its mantelpiece being used to exhibit small decorative items, souvenirs or trophies with picture frames hung above it. Another feature reminiscent of a Victorian house was a multipurpose room in the front which was an exclusive patriarch zone which was furnished in western style. It served as study room, office or a bedroom for the patriarch and had access to an attached bathroom.

Nevertheless, there are striking deviations from the bungalow typology particularly with reference to spatial planning of rear of the house. The kitchen, unlike the colonial bungalow kitchens which were separate from the main house, were part of the same house building located at the rear of the house overlooking a courtyard more in accordance with the traditional houses where it was an integral part of the courtyard. This placement reinvented the ladies zone within the house which was an important part of an indigenous household even in the modern and westernised families.

⁶⁸ Ibid. p. 238.

⁶⁹ Mehta, V. *A House Divided*. In Sidhwa, B. (ed.) (2005) *City of Sin and Splendour Writings on Lahore*. New Delhi: Penguin Books. P.



Directed by: Deepa Mehta

Earth 1947 (movie)

c. 1998.

8-56 A Dining Room in an Indigenous Bungalow at Lahore (1947)



Directed by: Deepa Mehta

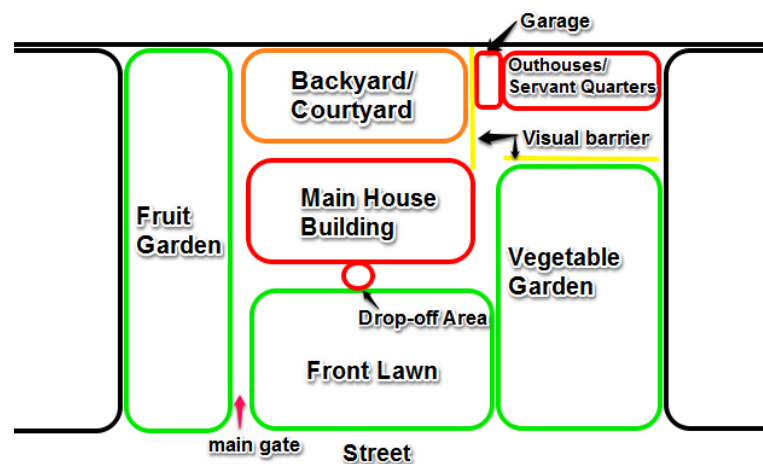
Earth 1947 (movie)

c. 1998.

8-57 A room in an indigenous bungalow at Lahore, 1947.

There are not many pictorial records in public domain about the life in indigenous bungalows of Lahore. Earth 1947, a story that revolved around partition, was directed by Deepa Mehta who was born in Lahore and migrated after 1947. Her bungalow interior attempt to recreate the ambience of a pre-1947 indigenous bungalows with fireplaces in every habitable room, Victorian style furniture and wall hung painting and decorative plates. Even the scenes in the dining room show immaculate replication of table manners.

In contrast to guest and patriarch zone, the family zone was more traditional in character. One major difference that distinguished an Indian bungalow from a British bungalow were the food aromas that escaped from the kitchen. Indian cooking utilised strong fragrance ingredients, garlic, onions, chillies, cinnamon to name a few, and all these ingredients were cooked in hot oil to accentuate every bit of spice. On the other hand, the British cooking employed subtle powered spices which were mixed in a batter and baked in an oven so that the spices could release their gentle aromas.⁷⁰



Drawn by: Shama Anbrine
2014.

8-58 Schematic of a typical residential site plan (not to scale)

While kitchen was the women's territory, the gardens were the pride of the elderly 'green-fingered' gentlemen. Their approach was usually utilitarian for the front lawn which was adorned with few flower pots that did not require much maintenance. However, the fruit gardens included a large variety of plants and trees from across Punjab and the vegetable garden was primary interest for the elderly gentlemen who carefully nurtured and tended to them.⁷¹ In addition to its natural benefits, the soft scape also aided in providing a visual barrier between the main house and the outhouses which were usually the

⁷⁰ Khan, S.A. *The Beginning of Five Queen's Road* in Sidhwa, B. (ed.) (2005) *City of Sin and Splendour Writings on Lahore*. New Delhi: Penguin Books. p. 26

⁷¹ For details see Tandon, P. (1968). p. 237-8. And Khanna, K. *I Went Back* in Sidhwa, B. (ed.) (2005) *City of Sin and Splendour Writings on Lahore*. New Delhi: Penguin Books. p. 111.

servant quarters and exhibited cheaper construction. Creepers, especially Grape vines, were trained to cover the outhouses.⁷²

The house of Model Town reimagined the native house style. The colonial influences would, nevertheless, be the chief reasons for this re-imagination, however the role played by native residents in this process played a vital role in this process. Therefore both of these processes have to be seen collectively in order to understand the change that was occurring in the native perception of house and house designs. The colonial Bungalow forms were readily adopted as process of this change primarily because of their non-foreign character and their similarity with the prevalent royal practices in the area.

This new type of house design offered the opportunity to practice traditionally while leading a modern life. For instance, a guest bedroom close to the entrance allowed the Model Town resident to be hospitable in a traditional way, yet maintaining the privacy of the house in a modern way. The gender segregation practiced in traditional houses was utilized in parallel with the public-private space concepts of the bungalow. Hence the cultural hybridity between the colonizer and the colonized assisted the development of new architectural forms which became a hallmark of residential architecture in the post-colonial years.

In its façade treatment, however, these houses drew inspirations from contemporary architectural movements, especially art deco and modernism. There are hints of traditional crafts and lavish ornamentation as well as machine age imagery, repetitive and bold geometrical motifs were incorporated within a perfectly symmetrical front elevation.

In short, the houses in Model Town reflected a similar design philosophy like other modern houses being constructed in India especially in the 1930's "The modern houses of upper-income families that were built in the late 1930s which "clearly reflected changing ways of life but a desire to hang on to traditions".⁷³

⁷² Mehta, V. *A House Divided*. In Sidhwa, B. (ed.) (2005) *City of Sin and Splendour Writings on Lahore*. New Delhi: Penguin Books. p. 115.

⁷³ Desai, M. Desai, M. and Lang, J. (2012). p. 108.

Conclusions

CONTENTS	Summary
	Practical Implications of the Research
	Directions for Future Research

This study has attempted to trace the development of Model Town; a utopian suburban garden town developed in the 1920's; in Lahore and provided an insight into its urban form, architecture and social character in pre-independence by partition era in British India. On one hand it looked into the process of development of the Town, from a native's (probably self-financed) pamphlet describing his 'scheme' for a new town in Lahore for the educated classes to its inception after getting sufficient support from the public and the Government and overcoming several bureaucratic and financial hurdles; and given an insight into life in the town in its early days. On the other hand, it has also extended the study of the built environment including the urban form of the town and the architectural character of its public, religious and residential buildings and open spaces.

The primary contribution of this study is to offer a new perspective to understand the colonial cultural transfers. The Co-operative Model Town Society Lahore is a unique example of adaptation of the Garden City, a British town planning idea, in Lahore, part of a British colony, by the British colonized native population. It was achieved by using the principles of the co-operative movement by the local people with active moral support from the Government. By documenting the history, urban form, social character and architecture of this Town, the resultant helped in developing an understanding of colonial bilateral cultural transfers among the colonizers and the colonized, and expounded on the salient factors which affected these cultural transfers and their outcomes in changing the built environment of a colonial city.

Summary

The key findings of this dissertation can be seen in the light of four major themes. These themes originate both from the methods used to undertake this research as well as the primary sources and literature in a comparative scenario of 20th century urban planning and architecture particularly in the British India.

Sources of Historiography

One of the fundamental aspects that come into question through this thesis is the lack of pre-independence historiography in Pakistan which is a common phenomenon in many new countries origination on the map after the end of colonialism. This matter is further alleviated by fact that this independence was not a straightforward process of changing of the governments. Instead it was achieved by a process of dividing one of the major province, Punjab, between the two newly independent states of India and Pakistan. The resulted in a catastrophic bloodshed and mass migration across the borders of India and Pakistan, which among many other problems also resulted in the damage and displacement of official documents. The new caretakers of the leftover records had no sensibility, sentimental association or resources to take care of these important historical documents. As a consequence they were left in basements storages and eventually precious historical records perished due to biological and climatic factors.

When I started searching for primary sources related to Model Town from a selected set of secondary literature which had mentioned the Town as a part of a wider research topic, it was quite evident that there were not official documentation available especially with reference to establishing its history. This led to exploring alternate sources of establishing historical evidence. In this quest the work was carried out in several archives with different related Government documents like the records of Public Works Department, Health and Sanitation department and Co-operative Societies in Punjab. However the major and most important source was the one that was least explored to date, i.e. the contemporary local newspapers. This source has not been explored to its full potential due to the fact that major libraries in Lahore had cherry-picked a selection of newspapers from pre-1947 era and thus the database was quite limited. However at the newspaper archives in the British Library, I was able to access the *Civil and Military Gazette Lahore* where many detailed news reports were published dated from 1920 to 1924 about the Model Town, its design competition, salient features, progress and criticisms. These reports formed a firm base to understand the progress of the Town.

I was also able to acquire a rare and unseen book from Government College University Library in Lahore written by the founder of the Town, Diwan Khem Chand. This book was a compilation of his pamphlets from 1919 to 1922 which were circulated to prospective members of the Town.

Records of the Model Town Society provided restricted and selective access to Bungalow Design Files. However there was not any record related to religious building as these were under the patronage of respective religious bodies and not the Model Town Society. Therefore on-site reconnaissance surveys were conducted and these buildings were documented by photography, photogrammetry and on-site measurements.

As Model Town Lahore has never been part of an independent study before, one of the major outcomes of this study is the development of a chronological bibliography of the available primary sources and cartographic sources about the Model Town. Many primary sources unearthed and explored during this study have never been investigated before.

Planning of New Towns in British Punjab

Like other colonies, the European colonial settlements started in the Indian subcontinent as distinct 'white towns' planned on virgin land which was located at a considerable distance from the native 'black' town. The reasons for maintaining this distance were many; from fear of moral corruption by intermingling with the natives to health and sanitation issues. However, with the passage of time, these white towns gave way for the city expansion. The cantonments and civil stations with wide tree-lined streets and detached bungalows were developed in all major cities. With the introduction of new administrative, educational system and agricultural system, new urban areas and building typologies started emerging. Railway and canal colonies were developed in different parts of the subcontinent to provide service infrastructure and residential accommodation to people involved in effective running of these new systems. Wide tree-lined malls ran through the city like a spine offering both ease in transportation and maintenance of security in busy commercial hub of the city. Regular grid planning with wide roads and

open spaces became hallmark of these towns. Bungalows with extravagant spaces, lawns and servant areas adorned these areas like jewels in a crown.

All these new developments were aimed at providing facilities to the government servants. The better facilities, e.g. bungalows, were provided for gazetted officers only which until 1870's comprised of British nationals only. The residential facilities were only available for in-service personnel hence after retirement the British officers would return home. When the native population was allowed to appear in the civil service entrance exams things started to transform as after retirement these officers were reluctant to go back to their original towns or inner city areas due to unavailability of facilities readily available in the government areas like access to good schools and clubs.

The colonial administrative centres were clear-cut territories of dominance as they explicitly exhibited the colonial authoritative hegemony in physical form. These were imposing in character regardless of their aesthetics. This is perhaps the reason that they have dominated the urban literature about colonial cities.

Lahore being the last major city of Indian subcontinent to be occupied by the British exhibits a fine example of a colonial city. Historically, Lahore had been regarded as a 'city of gardens' as many Mughal emperors and courtiers had constructed their gardens and in the suburbs of the old or 'walled' city, the gated community which housed the majority of the population. These gardens and tombs continued to serve military, administrative and residential purposes for the Sikhs and later the British. However, like other cities, British developed separate cantonment and civil station and adorned the city with all the new building typologies and the railways and canal system, making it the *Paris of the East*.

By the turn of 20th century, Lahore had become a congested city to live in. Health and sanitation issues in the inner city areas and mass migration of people from all over India in pursuit of education and services made it difficult for people, especially the educated middle classes, to access affordable housing.

Under these circumstances the Government and the indigenous population both addressed this issue in different ways. As a government initiative satellite colonies were developed in many parts of Punjab to reduce the load on Lahore. These were planned on a grid-iron with wide and airy streets and comprised of a *civil station with offices, treasury, courthouse and jail; the civil lines, including residences for the colonization officer and other related officers, a tennis club for the Europeans, and a church; an Indian quarter, with less stringent sanitary requirements, a market, a vernacular school, and religious buildings*. A hospital and post office were also included in these colonies.¹

In order to develop a strategic policy for the enhancement of living conditions in Lahore with a view of looking into possible expansion, Patrick Geddes was invited in 1914 to prepare a survey of the city. Geddes was a popular choice in India for this purpose as he had been associated developmental surveys in various states. His high regard for Lahore's historical background and low regard for the British interventions is quite evident in his report. His report is also the first time the idea of a Garden City is mentioned within the context of Lahore. According to him *the best garden city of India and perhaps the world should be located in Lahore*.

Government of Punjab introduced the principles of co-operative societies in the last years of 19th century to improve the moral, social and economic character of agricultural classes. These principles were soon incorporated in housing sector to give way for affordable housing. Among many people who favoured this scheme in Punjab was Mr. Maclagan (later Sir Edward Douglas Maclagan) who was the governor of Punjab when Model Town was being developed.

The indigenous population was also expanding beyond the confines of the walled city. In Lahore areas like Krishen Nagar were developed in early 20th century to cater for the ever-increasing housing needs. These areas were planned on a grid-iron pattern with wide streets however the rest of the

¹ For details see Cell, J.W. (1992). *Hailey A Study in British Imperialism, 1872–1969*. Cambridge: Cambridge University Press. p. 27-9.

configuration of these areas was more in line with the walled city than the British expansions.

In the extremes of British and natives population a third class was emerging due to acquisition of British education by the native population. This class which became an important part of running British administration was foreign educated and was easily adaptable to foreign ideas. In the early 20th century when the urban living in the western world was undergoing a transition and ideas like the Garden City were getting popular amongst affluent classes, it is not surprising that the Indian bourgeois also opted to construct one for themselves. With similar residential estates in the form of cantonment already existing in Lahore, it was inevitable that such a development would occur in the suburbs of Lahore. Four important lessons from the establishment of the Model Town Lahore became an essential component of the future development of similar towns in Lahore and in the subcontinent.

(1) Co-operation and self-reliance

Model Town Lahore was the first complete co-operative housing society in Indian subcontinent. As a pilot project it witnessed its shortcomings and problems but eventually it became one of the most successful urban experiments. Hence it provided a housing solution for the middle classes which would rely on the co-operative efforts of the prospective residents together with some basic reliefs from the Government.

(2) Like-minded people from similar backgrounds

Model Town aspired to bring like-minded people who were forward thinking and belonged to a modern educated class from the entire subcontinent to live together in a single town. Similarly later co-operative societies in Lahore have been developed under the patronage of various like-minded groups. However these groups are more specialized, for example, Doctors' Society, Architects' Society, Punjab Employees Cooperative Housing Society, WAPDA (water and Power Development Authority) Town to name a few. Thus the trend set by the Model Town still continues to inspire new residential developments in the region.

(3) Preference of suburban living in lieu of living in the main cities

The developers of the Model Town sought after a suburban healthy site for their proposed Town. The main reason was the congestion of inner city areas which were unable to cater for the residential and public facilities proposed for the Town. This also helped in keeping the price of the plots within the budget of an average future residents. Later developments in the city have also followed similar pattern by acquiring agricultural and wastelands in the vicinity of the city and developing them for residential purposes to address the problem of housing shortage for an average middle class salaried person.

(4) Area Allocation for different activities

The Model Town was designed as a self-contained town and thus catered for all basic provisions and facilities. As a result future developments were able to compare and modify spaces allocated for different purposes by using its physical data as benchmark.

In conclusion, the Model Town Lahore which was developed by the adaptation of a British town planning ideas in a British colony became the benchmark for future development of the cities in the region. It became a successful example because the British military and civil establishments in the colonial Lahore had developed self-sufficient residential establishments similar to the Garden city about half a century before the idea became popular for the middle classes in the Britain itself. Future post-colonial developments used this town as a reference guide. Some just adopted the idea for provision of elite housing, others for a particular class or government or private department. But nevertheless, all these developments got inspirations from this Town in one form or the other.

Architecture in British India

With the new administrative and educational system, new building typologies also started to emerge. All the major cities became home to municipal corporation offices, churches and cathedrals, libraries, school, college and university buildings, high courts, hospitals, police stations, courts, civil

secretariats, clubs and town halls. These buildings were erected under the supervision of Public Works Department. There had been extensive debates on the style of architecture that should be adopted by the PWD in order to establish British supremacy over local architecture. Earlier architects favoured Indo-Sarcenic hybrid styles, a blend of British and Local India Architecture, or Victorian styles to distinguish them from the local architecture. The British architects who were inspired from the prevalent traditional elements tried to implement them in their buildings as Robert Chisholm, one of the early British architects who embraced Indo Sarcenic style had suggested:

An architect practicing in India should unhesitantly elect to practice in native styles.²

However later architects like William Emerson propagated a more westernized architectural style; according to him

Buildings erected under the British Raj for any purpose connected with the natives, whether for Government, education, or charity, should show a distinctively British Character, at the same time adopting the details and feeling of the native architecture, and suiting to the requirements of each particular case.³

Nevertheless, these practices gave way to two extreme architectural stylistic legacies; the grand and imposing 'hybrid' architecture and the bare 'modern' PWD style. Despite acute criticism from the British architects and the later the post-colonial Indian/Pakistani nationalist architects, these styles became popular among the middle classes. Three main factors can be attributed to the popularity of British architecture among the native residents.

(1) The classes which adopted the English education perceived the foreign styles as a symbol of enlightenment and progress. In the eyes of these native the results of technology-based modernism which had transformed the face of modern India, roads and bridges, railways, substantial buildings, civil stations and cantonments, were awesome and imposing.

² Societies. 1884. *British Architect*. Vol. 21. No. 21. pp. 255-258.

³ Ibid.

(2) Architecture, in theory, was perceived by visionary architects. However in practice, it was undertaken by engineers taught in local engineering colleges where they were not taught or trained in indigenous forms. As a result the designs were inspired from the prevalent western architectural practices.

(3) In the end financial matters always favoured PWD style of architecture and building construction practices.

The attempts of architectural experimentation with different forms and amalgamations did not end here. Lahore became a best place to experiment where local architects like Bhai Ram Singh produced designs in western styles, 9–1, and British like John Lockwood Kipling showed their admiration for the native indigenous forms, 9–2.



Photograph by: Waqar Ahmed

Urban PK.

c. 2008

9–1 Cricket pavilion Lawrence Garden Lahore (const. 1885) by Architect Bhai Ram Singh

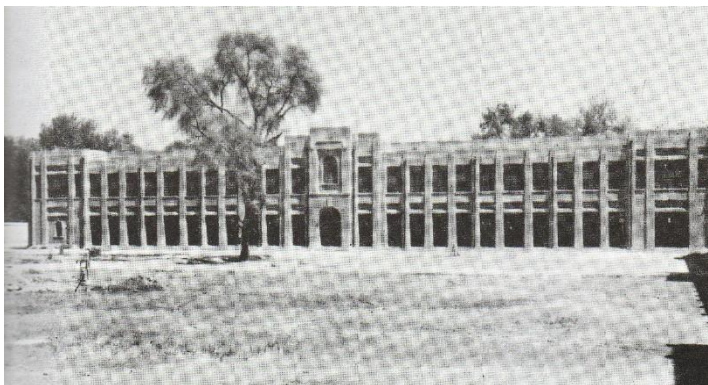


Photograph by: Shama
Anbrine
c. 2002.

9-2 Main Block Mayo School of the Arts (const. 1875) (Now National College of the Arts) Lahore designed by John Lockwood Kipling

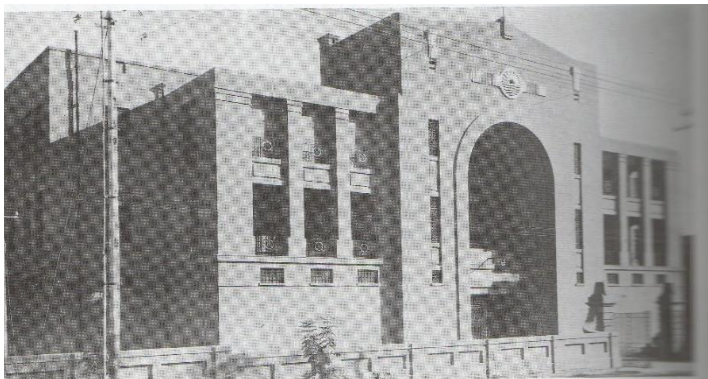
Architectural styles produced in Model Town Lahore, however, can be

seen in the light of contemporary modern movements like modernism and art deco. Particularly the motifs of club building are first of its kind in Lahore and set up a tradition for future public architecture, 9-3, 9-4.



Photograph by: Unknown
F.S. Aijazuddin
1937

9-3 Punjab Mental Hospital



Photograph by: Unknown
F.S. Aijazuddin
1937

9-4 Police Station

One important aspect was modernisation of religious architecture. Indigenous religious buildings in India were not influenced by the wave of westernization of architecture as these were under the patronage of independent religious bodies and the colonial government usually did not interfere in their working. That is why there was not much difference in the architectural style of these

buildings through centuries; a triple dome courtyard style with *quranic* calligraphy, multifoil arches and a high minaret had prevailed for a *masjid* since Mughal times, a square chamber crowned with pointy *sikhara* with extensive surface decoration symbolized a North Indian *mandir*, and a vast courtyard with a covered chamber crowned in a dome painted in white and gold depicted a *gurudwara*. The religious buildings in Model Town were significantly different than these typical styles. The *masjid*, while being triple domed and having a courtyard skipped did not have a minaret. It used corbelled arches instead of multifoil arches and the most astonishing feature was the use of Persian poetry in calligraphy. Similarly the *mandir* used features similar to PWD hybrid styles for the structure combined with a *sikhara* for prayer room and dome for the ancillary room. The *gurudwara* was probably not completed as it was a mere enclosure. Yet these buildings show an attempt of modernizing the religious architecture and gave way for adoption of new structural and decorative techniques to exhibit the forward-looking approach of the Town.

Forces of Community Unification

The study of Model Town gives an interesting illustration on the urban change that was occurring in a heterogeneous Indian society bound in strong distinctions and segregations based on religion, caste and regional associations. It exhibits a *western style educated middle class* trying to change the concept of suburban living which was previously associated with royalty and colonial rulers only. People from all over the subcontinent were willing to live in this Town with only one common factor ignoring the prevalent social stratification. This common parameter was being educated, specifically educated in western style with capabilities of understanding English both as a language and as a culture and adapting to it. English brought the indigenous people together more than any other prevalent denominator in the region. The residents were willing to live in a community and benefit from similar services, keeping aside any other discrimination. In the end, however, it could not be materialized as envisioned due to the fact that Indian nationalism did not conform to the same principles as western nationalism. The individual blocks within the Town became clusters of specific religious groups. Nevertheless, their enmity was less stringent than the rest of the Indian subcontinent. The

idea of utopian living as conceived by Diwan Khem Chand was not completely materialized in its true sense, but still, the Town offered one of the best examples of a Garden City.

Practical Implications of the Research

In the context of post-independence Indo-Pak subcontinent, the term 'Model Town' has undergone a completely different interpretation as compared to its western counterparts. It has been extensively (and sometimes ruthlessly) used as a superior urban stereotype. Almost all major cities in the region; Islamabad, Sialkot, Faisalabad, Gujranwala, Mumbai (Bombay), Kolkata (Calcutta), Delhi and Dhaka to name a few; have a residential development bearing this name which is usually characterized by the highest land prices in the city, offering a higher standard of living conditions and public amenities and promising an enhancement in the social status. All these developments were initiated as suburban towns like the Model Town Lahore. However with the passage of time these attract development of the surrounding areas and hence become part of a wider city extension.

Similarly private sector extensions have been an integral part of the city of Lahore especially in the last twenty years. Presently a large number of co-operative housing societies which are usually associated with different professional (doctors, architects, engineers) or government organizations (WAPDA, UET, NFC) span the periphery of the city.

The study of Model town, in this context, also helps in improvement of these and similar towns based on various factors that affected the development of Model Town. Therefore it is important to understand the Model Town in order to understand the demography and urban morphology of post-colonial expansion in the city and the region.

Directions for Future Research

The Co-operative Model Town Society Lahore offers a unique example of adaptation of a British town planning idea in a British colony which was achieved by co-operation primarily by the local people with active moral support from the Government. In this context this study is an attempt to

document its history, urban form, social character and architecture and develop its understanding in the wider context of the Indian subcontinent. By doing this the aim of the study is to develop an understanding of colonial bilateral cultural transfers among the colonizers and the colonized, to elaborate on the salient factors which affected these cultural transfers and their outcomes in changing the built environment of a colonial city.

This is the first study of this kind about the Town as this Town has never been part of an independent study before. Previous studies, though significant, were not extensive, mainly relied on fewer sources of primary knowledge and 'cut and paste' history. One of the important outcomes of this study is the development of a chronological bibliography of the available primary sources about the Model Town majority of which have never been explored before.

A major problem in this study has been the unavailability of primary sources in the public domain libraries. In these circumstances the availability of material has affected and delayed the final outcome of this study. It is quite possible that in future more primary sources are discovered in some private collections which shed light on more aspects about the planning of the Town.

The areas included in present Pakistan were the last to come under the British occupation and thus show a mature 'Raj' architecture and Town Planning. These were generally developed as indigenous projects by the British administrators on local level due to the fact the formal legislation for the Public Works Department was not undertaken until 1936. Therefore a variety of novel experimental works were undertaken in the area which are not present in other parts of Indian subcontinent, like clock towers, canal colonies and extensive cantonments. Colonial architecture and town planning of the region offers a wonderful opportunity for any researcher to understand a mature form of colonial 'Raj' architecture or as a continuum of British architecture beyond the British Isles. Model Town itself can also benefit from a new perspective by how it appears and delayers itself to the eyes of a complete stranger.

The post-colonial Model Town has dramatically transformed from its original character. In this context, it also offers a ground to understand the diaspora, dilemma and amnesia in architecture and urban planning in the aftermath of

events that resulted due to the independence-by-partition in 1947. It is a possibility that someone might be able to identify their old houses in the Town in a quest similar to the news report mentioned in the start of this chapter where a present resident of a house is searching for the original owner of his house, 9–5. There are several unexplored ideas also which would benefit from further research. During my study I came across photographs of a house which was located in Lahore, 9–6. This photograph appeared in a webpage created by Michael P. Hernandez as a tribute to his grandfather Frederic N. Hernandez and his companions of 8th and 308th Bombardment groups of the United States Army Air Force-CBI (China-Burma-India). I was unable to find anything about it other than its location so this can be point of origin for a new study in domestic architecture of Lahore.



Photographer: Naeem Ahmed Bajwa

Source: The News, 24 July 2013: 20.

c. 2013

9–5 in search of pre-1947 owners

A recent article in a local English daily showcased a resident of Model Town Lahore who was looking for the original owner of the house he was allotted after partition.



Photograph by: Frederic N. Hernandez⁴

Michael Hernandez.

Nov. 1944.

9-6 A House with mandir located in Lahore

Most importantly, the current scenario of the Town with decaying old buildings and rapid commercialization in the vicinity certainly calls for analytical studies to propose a conservation strategy to save the character features of the Town.

⁴ <http://daintheabi.com/>

Postscript

PhD is a starting point for anyone who wants to pursue a career in research as this is the first experience of conducting a large-scale research project. This experience not only enables the researcher to acquire skills in systematic research but at the same time gives him/her the opportunity of making significant original contribution on the horizon of knowledge. However, this contribution remains unknown until proper strategies are adopted for the dissemination of the research.

In this context the outcomes of this project have been presented at various conferences like:

1. *'Model Town Lahore- A Garden City'* in Architectural Heritage Workshop, University of Liverpool. 01/03/2013
2. *'Diwan Khem Chand, The Lost Hero'* in Envisioning the Indian City, Nottingham Trent University. 8/08/2012.
3. *'Model Town Lahore'* in COST WG1 'Actors and Networks of Expertise' Conference, University of Liverpool. 10-11/10/2011
4. *'Colonial Residential Architecture of Lahore-Pakistan'* in 7th Annual AHRA Research Student Symposium, University of Sheffield. 22/10/2010.
5. Annual Research Seminars (2010-2014) at School of Architecture University of Liverpool.

I am also due to present a paper titled *'Division, Diaspora and Discontinued Use: Abandoned Temples in Model Town Lahore (Pakistan)'* in 'Forming Ruins: An Interdisciplinary Postgraduate Workshop', which will be held on 02/07/2014 at the University of Nottingham.

Some parts of this project have also been presented in a semi-formal way as blog posts in Transnational Architecture Group (TAG)¹. A separate blog for

¹ <http://transnationalarchitecturegroup.wordpress.com>. established by Dr. Iain Jackson and Dr. Jessica Holland in January 2013.

Model Town Lahore² is also under development which will be live by the end of August, 2014. Selected photographs from this study are also being submitted in June 2014 for Scipio International Photography Contest titled *Crossing Borders and Shifting Boundaries: Architecture*.

The next stage of dissemination of this research will be in the form of published papers and eventually a monograph/book. Currently I am planning two draft papers with working titles of *Planning a Garden City in Lahore* and *Temples of Lahore* to be sent to *Planning Perspectives* and *Journal of South Asian Studies* respectively. In the meanwhile I am searching for potential sponsors for the publication of the book. My topic is a bit controversial as it goes against the normal historiography practices in Pakistan which highlight the Muslim contributions at the cost of all other significant contributors. In this context, one potential sponsor can be the *Aman ki Asha* (Desire for Peace) which is a joint venture between Geo Group (one of Pakistan's largest media groups) and the Times of India (one of India's largest newspaper). My historiography section has relied on the Times of India archive so this project can be serious contender for sponsorship. However, this possibility is still in its initial stage and I am working on its details.

² <http://modeltownlahore.wordpress.com>. created by Shama Anbrine.

Chronological Bibliography

One of the major aims of this study was to develop a collective database of all primary and secondary sources which cited any physical detail, description, analysis, criticism or observation about the Model Town Lahore with reference to its history, urban planning, architecture or social character. The following chronological bibliography is a compendium of all these sources. The list contains nearly 80 references more than half of which date from before 1947 as well as many post-1947 autobiographical texts written by pre-1947 residents of the Town.

1910-1919

1. Geddes, P. (1917). *Town Planning in Lahore, A Report to the Municipal Committee*. Lahore: Civil and Military Gazette Press. pp. 31-2.
2. Government of the Punjab, Medical Department. (1919). *Reports on the Sanitary Administration of the Punjab*. Lahore: Superintendent Government Printing.
3. By Own Correspondent. (1919). Government Help. *Civil and Military Gazette* [Lahore]. 16 Dec. p.19.
4. By Own Correspondent. (1919). House Accommodation in Lahore. *Civil and Military Gazette* [Lahore] 17 Dec. p.9.

1920-29

5. Calvert, H. (1921). *Report of the Working of the Co-operative Societies in the Punjab for the year ending 31st July 1920*. Lahore: Superintendent Government Printing. p.5.
6. By Own Correspondent. (1922). Lahore House Shortage. *The Times of India* [Bombay]. 19 May. p.7.
7. By Own Correspondent. (1922). Lahore's Model Suburbs, Settlement of Land Acquisition, Solid Progress. *Civil and Military Gazette* [Lahore]. 19 May. p.14.
8. By Own Correspondent. (1922) Model Town's Plans Exhibited. *Civil and Military Gazette* [Lahore]. 20 Dec. p.9.
9. Chand, D.K. (1922). *The Model Town Part I*. Lahore: Punjab Central Press.

10. Vaze, S.G. ed. (1922). Co-operation in the Punjab. *The Servant of India* [Pune]. 26 Oct. p.450.
11. Associated Press. (1923). Lahore's Model Town, Main features of lay-out plan, Scheme approved by Government. *Civil and Military Gazette* [Lahore]. 19 May. p.10.
12. By Own Correspondent. (1923). Lahore Model Town Scheme, Forcible Criticisms. *Civil and Military Gazette* [Lahore]. 9 June. p.12.
13. Calvert, H. (1923). *Report of the Working of the Co-operative Societies in the Punjab for the year ending 31st July 1922*. Lahore: Superintendent Government Printing. p.11.
14. Doyle, P. (1923). The Model Town Society. *Indian Engineering* [Calcutta] Vol. 72. p.199.
15. Retired Engineer (pseudonym) (1924). Model Town Society, Lahore. *The Times of India* [Bombay] 10 Jan. p.15.
16. By Own Correspondent. (1924). Lahore's Model Town, Foundation Stone of First Building Laid. *Civil and Military Gazette* [Lahore] 12 April. p.10.
17. By Own Correspondent. (1924). Town Planning in Lahore. *The Times of India* [Bombay] 14 April. p. 10.
18. Calvert, H. (1924). *Report of the Working of the Co-operative Societies in the Punjab for the year ending 31st July 1923*. Lahore: Superintendent Government Printing. p.10.
19. Gorrie, R. M. (1924). The Irrigated Plantations of Punjab. *Empire Forestry Journal*, Vol. 3, No. 1. p. 244.
20. Gorrie, R. M. (1924). Recent developments in the Punjab Irrigated Plantations. *The Indian Forester*, Vol. 50-12. p. 622.
21. Calvert, H. (1925). *Report of the Working of the Co-operative Societies in the Punjab for the year ending 31st July 1924*. Lahore: Superintendent Government Printing. p.11.
22. Strickland, C.E. (1926). *Report of the Working of the Co-operative Societies in the Punjab for the year ending 31st July 1925*. Lahore: Superintendent Government Printing. p.13.
23. Bhatnagar, B.G. (1927). *The Co-operative Organization in British India*. Allahabad: Ram Narain Lal. p.184-5.

24. Ram, G. (1927). *Pocket Book of Civil Engineering*. 5th ed. Lahore: Civil and Military Gazette Press. pp. 541, 545-550, 837.
25. By Own Correspondent. (1928). A Model Town. Punjab Government Remit Interest. *The Times of India* [Bombay] 6 Dec. p.12.
26. Darling, M.L. (1928). *The Punjab Peasant in Prosperity and Debt*. 2nd ed. London: Oxford University Press. p. 278.
27. Linton-Bogle, J.M. (1929). *Town Planning in India*. London: Oxford University Press. p. 30.
28. Strickland, C.E. (1930). *Report of the Working of the Co-operative Societies in the Punjab for the year ending 31st July 1929*. Lahore: Superintendent Government Printing. p.47.

1930-39

29. Gupta, R.B. and Mukherjee R. (1930). *Labour and Housing in India*. Calcutta: Longmans Green and Co. pp. 213-5.
30. Chand, D.K. (1930). *The Scheme for a Model Town and its Realization*. (Publication not found)
31. Whitley, J. H. (1931). *Report of the Royal Commission on Labour in India*. Vol. XV. London: H.M. Stationery Office. p. 403.
32. Talmaki, S.S. (1931). *Co-operation in India and abroad*. Mangalore: Basel Mission Press. p.126.
33. Srinivasan, V. (1932). The Co-operative Movement and the Housing Problem. *Madras Journal of Co-operation*. Vol. 24. p. 332.
34. Hough, E. M. (1932). *The Co-operative Movement in India its Relations to a Sound Economy*. London: P.S.King and Sons. p.191.
35. Gammans, L.D. (1933). *Report on Co-operation in India and Europe*. Singapore: Government Printing Press. p. 96-8.
36. Co-operative Societies Punjab, Registrar. (1934). *Annual Report on the Working of Co-operative Credit Societies in the Punjab*. Lahore: The Civil and Military Gazette Press. 36.
37. By Own Correspondent. (1935). Platform held to be Mosque. *The Times of India* [Bombay]. 24 Oct. p.4.

38. Varma, K.C. (1936). The Model Town. *Indian Co-operative Review*. Vol.2. pp. 617-31.
39. Ullah A. (1937). *The Co-operative Movement in the Punjab*. London: G. Allen and Unwin. pp. 209, 318-20.
40. Government of India. (1938). *Report of the Punjab Unemployment Committee 1937-8*. Lahore: Oriental Publishers. pp. 29-30.
41. By Own Correspondent. (1939). Dewan Khem Chand. *The Times of India* [Bombay] 15 July. p.15.

1940-49

42. Bedi, B.P.L. (1940). *Harvest from the desert: The life and works of Sir Ganga Ram*. Lahore: Sir Ganga Ram Trust Society. p. 251.
43. Gandhi, M.K. (1948). *Delhi diary, prayer speeches from 10-9-47 to 30-1-48*. Ahmedabad: Navajivan Pub. House. p. 195.

1950-59

44. Lahore, The Co-operative Model Town Society Limited. (1951). *Souvenir* presented to the delegates to The United Nations Economic Commission for Asia and the Far East, Feb-March 1951. Lahore: Lion Press.
45. Lahore, Board of Economic Inquiry. (1955). *Survey of small holdings in the Punjab*. Issue 122. p.13.
46. Vij, B.D. (1959). *Co-operation in Punjab; a history of the progress of the co-operative movement from 1904-5 to the year of grace 1958*. Jullundur: Punjab Co-operative Union. p. 228.

1960-69

47. Rudduck, G. (1961). *Towns and Villages of Pakistan, A Study*. Karachi: Government of Pakistan Planning Commission. p. 122.
48. Donnan, W.W. (1967). *Report to Tipton and Kalmbach, Inc. on drainage problems in Model Town, Lahore, West Pakistan 1960*. NIPA Journal Volumes 6-7.
49. Tandon, P. (1968). *Punjabi Century 1857-1947*. London: Chatto and Windus. pp. 236-43.

1970-79

50. Mascal, E. (1971). *All Change*. National Archives.
51. Bedi, F. (1972). *Memories of Acharya Raghuvira*. Sikkim: Luxlapiz. p.17.
52. Sain, K. (1978). *Reminiscences of an Engineer*. New Delhi: Young Asia Publications. pp.46-8.

1980-89

53. King, A.D. (1984). *The Bungalow: The Production of a Global Culture*. London: Routledge. p. 57.

1990-99

54. Khan, M. (1995). Cultural Transfers: The Repossession of Architectural Form. *Environmental Design: Journal of the Islamic Environmental Design Research Centre* 1-2. pp. 84-103.
55. Anand, S. (1998). *Lahore: Portrait of a lost City*. Lahore: Vanguard. pp. 1, 62, 78.

2000-09

56. Ahmad, S.M. (2001). *A Lucky Pilot: Memoirs of Retired Wing Commander Lanky Ahmad*. Lahore: Ferozsons. p. 7.
57. Saleem, A. (2001). *Lahore 1947*. New Delhi: Indian Research Press.
58. Vandal, P. (2001). The Dream and the Reality. *The News International* [Lahore]. June 24. p 15.
59. Pritam, A. (2003). *Lahore 1947*. Lahore: Sang-e-Meel Publications.
60. Aijazuudin, F.S. (2003). *Lahore recollected: An Album*. Lahore: Sang-e-Meel Publications. pp. 205-12.
61. Lari, Y. (2003). *Lahore: Illustrated City Guide*. Karachi: Heritage Foundation Pakistan. p. 103.
62. Glover, W.J. (2004). A Feeling of Absence from Old England: The Colonial Bungalow. *Home Cultures*. Vol. 1. No. 1. pp. 61-82.
63. Glover, W.J. (2005). Objects, Models, and Exemplary Works: Educating Sentiment in Colonial India. *The Journal of Asian Studies*. Vol. 64. No. 3. pp. 539-66.

64. Morris, J. (2005). *Stones of Empire: The Buildings of the Raj*. Oxford University Press. p. 205.
65. Ahmed, S. (2006). *Queer Phenomenology: Orientations, Objects, Others*. Durham USA: Duke University Press. pp. 151-2.
66. Lister, D. (2006). Model Town, Lahore. *Times* [London] 2 Sept. p. 8.
67. Vandal P. And Vandal S. (2006). *The Raj, Lahore and Bhai Ram Singh*. Lahore: National College of the Arts. p. 81-94.
68. Nevile, P. (2006). *Lahore A Sentimental Journey*. New Delhi: Penguin Books, xix.
69. Glover, W.J. (2007). *Making Lahore Modern: Constructing and Imagining a Colonial City*. Minnesota: Univ. of Minnesota Press, pp.151-7.
70. Sengupta, R. (2007). *Delhi Metropolitan: The Making of an Unlikely City*. Delhi: Penguin Books India, pp.111-3.
71. Hameed, A. (2008). *Lahore Lahore Aye* [Lahore is Lahore] translated by Khalid Hasan. Lahore: Vanguard Books.
72. Ruggles, D. F., & Silverman, H. (2009). *Intangible Heritage Embodied*. Dordrecht, The Netherlands: Springer, pp. 49-50.

2010-date

73. Renaux, H. (2011). *TRUE CHILDREN of the Raj*. USA: Trafford Publishing. p. 68.
74. The National Archives. (2011). Reginald Story. *Panjab 1947: A heart divided*. Online Exhibition. [Accessed 2/12/2012]
<http://www.nationalarchives.gov.uk/panjab1947/reginald.htm>

Cartographic Sources

75. Ram, G. (1927). *Pocket Book of Civil Engineering*. 5th ed. Lahore: Civil and Military Gazette Press. p. 837.
76. Guide Map of Lahore 1935. Accessed 14 April 2014 from British Library Online Gallery.
77. Map of Model Town 1937. Retrieved from the private papers of John E.W. Eustace. Courtesy: Ms. Emmy Eustace.
78. Rudduck G. (1961). *Towns and Villages of Pakistan, A Study*. Karachi: Government of Pakistan Planning Commission. p.12.

Bibliography

Archives

The Co-operative Model Town Society Lahore

Residential Building Permit Files (selective access) (1929-1939)

Railway Headquarters' Lahore

Plans of Mayo Garden's Bungalows in Lahore.

Cantonment Board Lahore

Residential Building Permit Files.

Oriental and India Office Collections (OIOC) British Library

Punjab Public Works Department Annual Reports (1910-1940)

Co-operative Societies in the Punjab Annual Reports (1910-1940)

Punjab Forest Records Annual Reports Annual Reports (1910-1940)

Working Of Small Towns in Punjab Annual Reports (1910-1940)

Punjab Colonies Annual Reports (1932-34)

Newspapers Archive British Library Colindale

Civil and Military Gazette Lahore (1920-1939)

The Times of India Online Archive (1920-1939)

John Ryland's Library University of Manchester

Annual Reports, Public Works Department India (1910-1930)

Donald Mason Library School of Tropical Medicine University of Liverpool

Annual Reports on Health and Sanitation in Punjab (1890-1920)

Sydney Jones Archives University of Liverpool

Baron Holford's Private Papers

Published Works

- Advisory Committee for Plague Investigation in India. (1910). *Report on Plague Investigations in India*. Calcutta: Superintendent Government printing.
- Aguiar, M. (2011). *Tracking Modernity: India's Railway and the Culture of Mobility*. Minneapolis: University Minnesota Press.
- Ahmed, I. (2004). *Forced Migration and Ethnic Cleansing in Lahore in 1947: Some First Person Accounts*. Lund: EASAS.
- Ahmed, K. (2001). *Pakistan: Behind The Ideological Mask: Facts About Great Men We Don't Want To Know*. Lahore: Vanguard.
- Aijazuddin, F. S. (1991). *Lahore: Illustrated Views of the 19th Century*. Ahmedabad: Mapin.
- Aijazuddin, F.S. (1992). *Historical Images of Pakistan*. Lahore: Ferozesons.
- Aijazuddin, F.S. (2003). *Lahore Recollected: An Album*. Lahore: Sang-e-Meel publications
- Al Sayyad, N. (1993). *Forms of Dominance: On the Architecture and Urbanism of the Colonial Enterprise*. Aldershot: Avebury.
- Ali, I. (1988). *The Punjab under Imperialism, 1885-1947*. Princeton: Princeton University Press.
- Allen, C. (1975). *Plain Tales from the Raj: Images of British India in the Twentieth Century*. London: Andre Deutsch/British Broadcasting Corporation.
- Anand, S. (1998). *Lahore, Portrait of a Lost City*. Lahore: Vanguard Books.
- Archer, M. (1968). *Indian Architecture and the British 1780-1830*. London: RIBA.
- Arnold, D. (2000). *Science, Technology and Medicine in Colonial India*. New York: Cambridge University Press.
- Asher, C. B. (1992). *Architecture of Mughal India*. 2nd ed. Cambridge: Cambridge University Press.
- Asher, C. B. and Metcalf, T. (1994). *Perceptions of South Asia's Visual Past*. New Delhi: Oxford University Press.
- Asher, C. E. B. and Talbot, C. (2006). *India before Europe*. Cambridge: Cambridge University Press.
- Ashraf, K. K., Belluardo, J. and York, A. L. O. N. (1998). *An Architecture of Independence: The Making Of Modern South Asia: Charles Correa, Balkrishna Doshi, Muzharul Islam, Achyut Kanvinde*. New York: Architectural League.
- Ata-Ullah, N. (1998). Stylistic Hybridity and Colonial Art and Design Education: A Wooden Carved Screen by Ram Singh. *Colonialism and The*

Object: Empire, Material Culture, and the Museum, Tom Barringer and Tom Flynn (ed.), pp.68–81. London: Routledge.

Atkinson, G.F. (1911). *Curry and Rice on Forty Plates; or, the Ingredients of Social Life at "Our Station" In India*. 5th ed. London: W. Thacker.

Azeem, R. (2013). *Lahore: Tareekh-O-Tameer* (Lahore: History and Development). Lahore: Jumhoori Publications.

Baden Powell, B. H. (1892). *The Land Systems of British India*. 3 Vols. Oxford: Clarendon Press.

Bafna, S. (2000). On the Idea of the Mandala as a Governing Device in Indian Architectural Tradition. *Journal of the Society of Architectural Historians*. 59, No. 1: pp.26–49.

Ballantyne, T. (2010). The Changing Shape of the Modern British Empire and Its Historiography. *The Historical Journal*. Vol. 53: pp. 429-452.

Ballantyne, T. and Burton, A. (ed.) (2005). *Bodies in Contact: Rethinking Colonial Encounters in World History*. Durham, N.C.: Duke University Press.

Ballhatchet, K. (1980). *Race, Class, and Sex under the Raj: Imperial Attitudes and Policies and Their Critics, 1793–1905*. New York: St. Martin's Press.

Banerjee, S.M. (2004). Down Memory Lane: Representations of Domestic Workers in Middle-Class Personal Narratives of Colonial Bengal. *Journal of Social History*. Vol. 37. pp. 681–708.

Baqir, M. (1952). *Lahore, Past And Present: Being An Account Of Lahore Compiled From Original Sources*. Delhi: Panjab University Press.

Barringer, T, and Flynn, T. (ed.) (1998). *Colonialism and the Object: Empire, Material Culture, and the Museum*. London: Routledge.

Bartholomew, J. G. (1913). *A Literary and Historical Atlas of Asia*. London: J. M. Dent and Sons.

Bassett, E. B. (1869). *The Model Town: Or, the Right and Progressive Organization of Industry for the Production of Material and Moral Wealth*. Cambridge University Press.

Bates, C. (2007). *Subalterns and Raj: South Asia since 1600*. Oxon: Routledge.

Baucom, I. (1999). *Out of Place: Englishness, Empire, and the Locations of Identity*. Princeton: Princeton University Press.

Bayley, S. (1975). *The Garden City*. Milton Keynes: Open University Press.

Bayly, C. A. (1983). *Rulers, Townsmen and Bazaars: North Indian Society in the Age of British Expansion 1770-1870*. Cambridge: Cambridge University Press.

Bayly, C. A. (ed.) (1990). *Indian Society and the Making of the British Empire*. Cambridge: Cambridge University Press.

- Beattie, M. (2004). Sir Patrick Geddes and Barra Bazaar: Competing Visions, Ambivalence and Contradiction. *The Journal of Architecture*. 9. No. 2: pp. 131-50.
- Beveridge, H. (1862). *A Comprehensive History Of India, Civil, Military And Social: From The First Landing Of The English, To The Suppression Of The Sepoy Revolt; Including An Outline Of The Early History Of Hindoostan*. London: Blackie.
- Beverley, E.L. (2011). Colonial Urbanism and South Asian Cities. *Social History* 36. No. 4: pp. 482-97.
- Bhabha, H. (2012). *The Location of Culture*. 2nd ed. London: Routledge.
- Bhabha, H. (ed.) (2012). *Nation and Narration*. Oxon: Routledge.
- Bhatia, G. (1994). *Punjabi Baroque and Other Memories of Architecture*. New York: Penguin Books.
- Bhatt, R. (2001). Indianizing Indian Architecture: A Postmodern Tradition. *Traditional Dwellings and Settlements Review*. Vol. 13. No. 1 (FALL 2001): pp. 43-51.
- Bhatt, V. and Scriver, P. (1990). *After The Masters: Contemporary Indian Architecture*. Middletown, N.J: Grantha.
- Blunt, A. (1999). Imperial Geographies of Home: British Domesticity in India, 1886-1925. *Transactions of the Institute Of British Geographers*, Vol.24. No. 4: pp. 421-440.
- Blunt, A. (1999). Imperial Geographies of Home: British Domesticity in India, 1886-1925. *Transactions of the Institute of British Geographers*. New Series. Vol. 24. No. 4: pp. 421-440.
- Bosselmann, P. (2008). *Urban Transformation: Understanding City Form and Design*. Washington: Island Press.
- Brown, R.M. (2003). The Cemeteries and the Suburbs: Patna's Challenges to the Colonial City in South Asia. *Journal of Urban History* 29. No. 2: pp.151-72.
- Brunhes, J. (1920). *Human Geography*. Chicago: Rand, McNally and Co.
- Buckingham, J. S. (1849). *National Evils and Practical Remedies: With the Plan of a Model Town ... Accompanied By an Examination of Some Important Moral and Political Problems*. London: P. Jackson, late Fisher.
- Buettner, E. (2004). *Empire Families*. Oxford: Oxford University Press.
- Buettner, E. (2005). *Empire Families: Britons and Late Imperial India*. Oxford University Press.
- Burton, A. M. (2003). *Dwelling In The Archive: Women Writing House, Home, And History In Late Colonial India*. Oxford: Oxford University Press.
- Calvert, H. (1925). *The Size And Distribution Of Agricultural Holdings In The Punjab*. Lahore: Civil and Military Gazette Press.

Calvert, H. (1926). *The Law and Principles of Co-Operation: Being the Co-Operative Societies Act, No II of 1912 and Bombay Act No VII of 1925, With Introduction, Notes and an Appendix*. Calcutta: Thaker.

Calvert, H. (1936). *The Wealth and Welfare of the Punjab*. Lahore: Civil and Military Gazette.

Campbell, G. (1852). *Modern India. A Sketch of the System of Civil Government. To which is Prefixed Some Account of the Natives and Native Institutions*. London: John Murray.

Casimir, M.J. and Glatzer, B. (1971). Šāh-i Mašhad, a Recently Discovered Madrasah of the Ghurid Period in Ġarġistān (Afghanistan). *East and West*. Vol. 21, No. 1/2 (March-June 1971).

Çelik, Z. (1997). *Urban Forms and Colonial Confrontations: Algiers under French Rule*. Berkeley: University of California Press.

Çelik, Z. (1997). *Urban Forms and Colonial Confrontations: Algiers under French Rule*. Berkeley: University of California Press

Çelik, Z. (1999). New Approaches to the "Non-Western" City. *Journal of the Society of Architectural Historians*. Vol.58. No. 3: pp. 374-78.

Cell, J. (1992). *Hailey: A Study in British Imperialism 1972-1969*. Cambridge: Cambridge University Press.

Chakrabarti, V. (1998). *Indian Architectural Theory and Practice: Contemporary Uses of Vastu Vidya*. Surrey: Curzon Press.

Chakrabarty, D. (1992). Postcoloniality and the Artifice of History: Who Speaks for 'Indian' Pasts? *Representations*. Vol. 37: pp. 1-26.

Chakrabarty, D. (1992). Provincializing Europe: Postcoloniality and the Critique of History. *Cultural Studies*. Vol. 6. No. 3: pp. 337-57.

Chand, D.K. (1922). *The Model Town*. Part 1. Lahore: Punjab Central Press.

Chang, J. and King, A.D. (2011). Towards a Genealogy of "Tropical Architecture": Historical Fragments of Power-Knowledge, Built Environment, and Climate in the British Colonial Territories. *Singapore Journal of Tropical Geography* 32. No. 3: pp. 283-300.

Chatterjee, I. (ed.) (2004). *Unfamiliar Relations: Family and History in South Asia*. New Brunswick, NJ: Rutgers University Press.

Chatterjee, P. (1993). *The Nation and its Fragments: Colonial and Postcolonial Histories*. Princeton: Princeton University Press.

Chattopadhyay, S. (2000). Blurring Boundaries: The Limits of "White Town" in Colonial Calcutta. *Journal of the Society of Architectural Historians* 59. No. 2: pp.154-79.

Chattopadhyay, S. (2002). 'Goods, Chattels and Sundry Items': Constructing 19th-Century Anglo-Indian Domestic Life. *Journal of Material Culture* 7. No. 3: pp. 243-71.

Chattopadhyay, S. (2005). *Representing Calcutta: Modernity, Nationalism, and the Colonial Uncanny, Asia's Great Cities; Asia's Transformations*. London; New York: Routledge.

Chopra, P. (2003). *The City and its Fragments: Colonial Bombay 1854-1918*. PhD Dissertation University of California Berkeley.

Chopra, P. (2007). Refiguring the Colonial City: Recovering the Role of Local Inhabitants in the Construction of Colonial Bombay, 1854-1918. *Buildings & Landscapes: Journal Of the Vernacular Architecture Forum*, Vol. 14 (Fall, 2007), pp.109-125.

Chopra, P. (2011). *A Joint Enterprise: Indian Elites and the Making of British Bombay*. Minneapolis: University of Minnesota Press.

Chopra, P., & Chopra, P. (1999). *Monuments of the Raj*. New Delhi: Aryan Books International.

Clarke, C.P. (1883). Some Notes on the Domestic Architecture of India. *Journal of the Society of the Arts*. Vol. 31. No. 1594 (June 8).

Clayton, D. and D. Gregory (ed.) (1996). *Colonialism, Postcolonialism and the Production of Space*. Oxford: Blackwell.

Cohn, B. S. (1996). *Colonialism and its Forms of Knowledge: The British in India*. Princeton: Princeton University Press.

Collingwood, R.G. (1946). *The Idea of History*. Oxford: Oxford University Press.

Compton, H. (1904). *Indian Life in Town and Country 1853-1906*. London: George Newnes Limited.

Cooper, F. and Stoler, A.L. (ed.) (1997). *Tensions of Empire: Colonial Cultures in a Bourgeois World*. Berkeley: University of California Press.

Corbusier, L. (1933). *The Radiant City: Elements of a Doctrine of Urbanism to be Used as the Basis of Our Machine Age Civilization*. New York: Orion Press

Crinson, M. (2008). Singapore's Moment: Critical Regionalism, Its Colonial Roots and Profound Aftermath. *The Journal of Architecture* 13. No. 5: pp. 585-605.

Crinson, M. (2013). *Empire Building: Orientalism and Victorian Architecture*. London: Routledge.

Crinson, M. (ed.). (2005). *Urban Memory: History and Amnesia in the Modern City*. London: Routledge.

Crompton, R. E. (1895). The Use of Electricity for Cooking and Heating. *The Journal of the Society of Arts* .Vol. 43, No. 2214 (April 26): pp. 511-522.

Crouch, C. (2002). *Design Culture in Liverpool, 1880-1914: The Origins of the Liverpool School of Architecture*. Liverpool: Liverpool University Press.

Davies, P. (1985). *Splendours of the Raj: British Architecture in India 1660-1947*. London: J. Murray.

Davies, P. (1985). *Splendours of the Raj*. London: J. Murray.

Desai, M. Desai, M. and Lang, J. (2012). *The Bungalow In Twentieth-Century India: The Cultural Expression Of Changing Ways Of Life And Aspirations In The Domestic Architecture Of Colonial And Post-Colonial Society*. Farnham, Surrey: Ashgate.

Dhingra, M. L. (1901). Indian Sanitation: A Personal View. *Indian Magazine and Review*. 372 (December 1901). pp. 311–30.

Dhingra, M. L. (1901). Sanitation in India. *Indian Magazine and Review*. 372 (December 1901). pp.415.

Dick, T. (1839). *On the Mental Illumination and Moral Improvement of Mankind*. Philadelphia: Key and Biddle.

Dilke, C. W. (1868). *Greater Britain: A Record of Travel in English-Speaking Countries during 1866 and 1867*. 2 Vols. London: MacMillan and Co.

Dirks, N. B. (2001). *Castes of Mind: Colonialism and the Making of Modern India*. New Jersey: Princeton University Press.

Docker, J. (1992). *Dilemmas of Identity: The Desire for the Other in Colonial and Post Colonial Cultural History*. London: Institute of Commonwealth Studies.

Donald, J. (1999). *Imagining the Modern City*. London: Athlone Press.

Dossal, M. (1991). *Imperial Designs and Indian Realities: The Planning of Bombay City, 1845–1875*. Delhi: Oxford University Press.

Dwivedi, B. (2000). *Environmental Vaastu*. Delhi: Diamond Pocket Books.

Edney, M. H. (1997). *Mapping an Empire: The Geographical Construction of British India, 1765-1843*. Chicago: University of Chicago Press.

Evenson, N. (1989). *The Indian Metropolis: A View towards the West*. New Delhi: Oxford University Press.

Fanon, F. (1967). *Black Skin, White Masks*. New York: Grove Press.

Fishman, R. (1982). *Urban Utopias in the Twentieth Century: Ebenezer Howard, Frank Lloyd Wright, Le Corbusier*. Cambridge, Massachusetts: MIT Press.

Flaunders, J. (2002). *A Circle of Sisters*. London: Penguin Books.

Gaskell, P. (1833). *The Manufacturing Population of England, It's Moral, Social and Physical Conditions*.

Geddes, P. (1917). *Town Planning in Lahore: A Report to the Municipal Council*. Lahore: Commercial Print Works.

Glover, W. J. (1999). *Making Lahore Modern: Urban Form and Social Practice in Colonial Punjab, 1849--1920*. PhD Dissertation University of California, Berkeley.

Glover, W.J. (2004). "A Feeling of Absence from Old England:" The Colonial Bungalow. *Home Cultures* 1. No. 1: pp. 61-82.

Glover, W.J. (2005). Objects, Models, and Exemplary Works: Educating Sentiment in Colonial India. *The Journal of Asian Studies* 64. No. 3: pp. 539-56.

Glover, W.J. (2007). *Making Lahore Modern, Constructing and Imagining a Colonial City*. Minneapolis: University of Minnesota Press.

Glover, W.J. (2008). *Making Lahore Modern: Constructing and Imagining a Colonial City*. Minneapolis: University of Minnesota Press.

Gooptu, N. (2001). *The Politics of the Urban Poor in Early Twentieth-Century India*. (Vol. 8). Cambridge: Cambridge University Press.

Government of India (Public Works Department). (1856). *Selection from the Records of the Government of India (Public Works Department) No, XIII Progress Reports of the Public Works Department for the Year 1854-55*. Calcutta: Thos' Jones 'Calcutta Gazette' Office.

Government of Punjab, Medical Department. (1870-1920). *Reports on the Sanitary Administration of the Punjab*. Lahore: Government Publishing.

Government of Punjab. (1884). *Gazetteer of the Lahore District 1883-4*. Calcutta: Calcutta Central Press Company.

Government of Punjab. (1928). *Punjab Public Works Department Papers, No 78 Instructions for Making Reinforced Concrete Battens*. Lahore: Government Printing.

Government of Punjab. (1929). *Punjab District Gazetteers. Part. 1 Muzaffargarh District*.

Government of Punjab. (1937). *Report of the Punjab Unemployment Committee*. Lahore: Superintendent Government Printing.

Great Britain, Board of Education. (1908). *The Acland Report, Consultative Committee Report Upon the School Attendance of Children Below the Age of Five*. London: HM Stationery Office.

Great Britain, Ministry of Education. (1919). *The Health of the School Child*. London: HM Stationery Office.

Grewal, I. (1996). *Home and Harem: Nation, Gender, Empire, and the Cultures of Travel*. Durham, N.C.: Duke University Press.

Groat, L., & Wang, D. (2012). *Architectural Research Methods*. 2nd ed. New Jersey: John Wiley & Sons.

Hall, P. (2013). *Good Cities, Better Lives: How Europe Discovered The Lost Art Of Urbanism*. London: Routledge.

- Hall, P. G. (2002). *Cities of Tomorrow: An Intellectual History of Urban Planning and Design in the Twentieth Century*. Oxford: Wiley-Blackwell.
- Hameed, A. (2008). *Lahore Lahore Aye* [Lahore is Lahore] translated by Khalid Hasan. Lahore: Vanguard Books.
- Hardy, D. (1989). *War, Planning and Social Change: The Example of the Garden City Campaign, 1914–1918*. Planning Perspectives. Vol. 4. No.2: pp. 187-205.
- Harrison, M. (1994). *Public Health in British India: Anglo-Indian Preventive Medicine, 1859–1914*. Cambridge: Cambridge University Press.
- Haynes, D. E. (1991). *Rhetoric and Ritual in Colonial India: The Shaping Of a Public Culture in Surat City, 1852-1928*. Berkeley: University of California Press.
- Hirschmann, H. (1971). *Using South Asian Newspapers for Historical Research*. The Journal of Asian Studies. Vol. 31. No. 1 (Nov., 1971). pp. 143-150.
- Hollow, M. (2011). Suburban Ideals on England's Interwar Council Estates. *Journal of the Garden History Society*. 39: No. 2: pp. 203-217.
- Home, R. K. (1996). *Of Planting and Planning: The Making of British Colonial Cities*. London: E and F.N. Spon.
- Hosagrahar, J. (2001). Mansions to Margins: Modernity and the Domestic Landscapes of Historic Delhi, 1847-1910. *Journal of the Society of Architectural Historians* Vol.60. No.1: pp. 26-45.
- Hosagrahar, J. (2005). *Indigenous Modernities: Negotiating Architecture and Urbanism*. London: Routledge.
- Howard, E. (1902). *Garden Cities of Tomorrow*. London: Swan Sonnenschein and Co.
- Hunter, W.W. (1882). *The Indian Empire: Its People, History, and Products*. London: Trübner.
- Hysler-Rubin, N. (2013). *Patrick Geddes and Town Planning*. 2nd ed. Abingdon, Oxon: Routledge.
- Iyer, A.V.T. (1926). *Indian Architecture*. 3 Vols. Madras: A.V.T Iyer and Sons.
- Jackson, N. Lintonbon, J. and Staples. B. (2010). *Saltaire: The Making of a Model Town*. Reading: Spire Books.
- Jacobs, J. (1996). *Edge of Empire: Postcolonialism and the City*. London: Routledge, 1996.
- Jeremiah, D. (2000). *Architecture and Design for the Family in Britain*. Manchester: Manchester University Press.
- Joshi, A. (2008). *Town Planning Regeneration of Cities*. New Delhi: New India Publishing.
- Joshi, K.C. (1937). *A Book on Joshi's Modern Designs*. [With Illustrations, Including a Portrait.]. Amritsar: Bir Publishing Company.

- Joshi, S. (2001). *Fractured Modernity: Making Of a Middle Class in Colonial North India*. New Delhi: Oxford University Press.
- Kapur, G. (2000). *When Was Modernism? Essays on Contemporary Cultural Practice in India*. New Delhi: Tulika Books.
- Kennedy, D. K. (1996). *The Magic Mountains: Hill Stations and the British Raj*. Berkeley: University of California Press.
- Kerr, I. J. (1977). *The Punjab Province and the Lahore District, 1849-1872: A Case Study of British Colonial Rule and Social Change in India*. Ann Arbor: University Microfilms International.
- Khan, A. (1991). *Development of Mosque Architecture in Pakistan*. Islamabad: Lok Virsa Publication.
- Khan, A. (2003). *Islamic Architecture in South Asia*. Karachi: Oxford University Press.
- King, A. D. (ed.) (1984). *Buildings and Society: Essays on the Social Development of the Built Environment*. London, Boston, Melbourne and Henley: Routledge & Keagan Paul.
- King, A.D. (1976). *Colonial Urban Development: Culture, Social Power and Environment*. London: Routledge and Kegan Paul.
- King, A.D. (1984). *The Bungalow: The Production of a Global Culture*. London, Boston, Melbourne and Henley: Routledge and Keagan Paul.
- King, A.D. (2004). *Spaces of Global Cultures: Architecture, Urbanism, Identity*. London; New York: Routledge.
- Kipling, J.L. (1886). Indian Architecture of Today. *The Journal of Indian Art*. Vol. 1. No. 3.
- Kipling, R. (1901). *Kim*. 1st ed. Raleigh, N.C.: Alex Catalogue.
- Kusno, A. (2010). *Appearances of Memory: Mnemonic Practices of Architecture and Urban Form in Indonesia*. Durham, NC, USA: Duke University Press.
- Kvale, S. (1996). *Interviews: An Introduction to Qualitative Research Interviewing*. SAGE.
- Lal, K. (1884). *Tareek-e-Lahore* (History of Lahore). Lahore: Punjab Central Press.
- Lanchester, H.V. (1942). Architecture and Housing in India. *Architectural Design and Construction*. May 1942. pp. 94-120.
- Lanchester, M. (1914). *Electric Cooking Heating, Cleaning etc.* London: Constable and Co.
- Lang, J. (2002). *A Concise History of Modern Architecture in India*. New Delhi: Permanent Black.
- Lang, J. Desai, M. and Desai, M. (1997). *Architecture and Independence: The Search for Identity - India 1880 To 1980*. Oxford: Oxford University Press.

Langenbach, R. (2000). Intuition from the past: What we can learn from Traditional Construction in Seismic Areas. Conference Proceedings for Earthquake-safe: Lessons to be learned from traditional construction. *International Conference on the Seismic Performance of Traditional Buildings*. Istanbul: UNESCO / ICOMOS.

Latif, S. (1892). *Lahore: Its History, Architectural Remains and Antiquities*. Lahore: New Imperial Press.

Lawrence, H. M. (1854). *General Report upon the Administration of the Punjab Proper for the Years 1849-50 & 1850-51 Being the First Two Years after Annexation*. Lahore: Chronicle Press.

Lawrence, J. (1997). *Raj: The Making and Unmaking of British India*. London: Little, Brown and Company.

Leach, A. (2010). *What is Architectural History?* Cambridge: Polity Press.

Legg, S. (2007). *Spaces of Colonialism: Delhi's Urban Governmentalities*. London: Wiley-Blackwell.

Linton-Bogle, J.M. (1929). *Town Planning in India*. London: Oxford University Press.

Lobo, M., & Morgan, L. (2012). Whiteness and the City: Australians of Anglo-Indian Heritage in Suburban Melbourne. *South Asian Diaspora*. Vol.4. No.2: pp. 123-137.

Lopez, A.R. and Weinstein, B. (2012). *The Making of the Middle Class toward a Transnational History of the Middle Class*. Durham, N.C.: Duke University Press.

Loudon, J.C. (1832). An Encyclopædia of Cottage, Farm, and Villa Architecture and Furniture: Containing Numerous Designs for Dwellings. *Iron: An Illustrated Weekly Journal for Iron and Steel ...*, Volume 17.

Lu, D. (2011). *Third World Modernism*. New York, NY: Routledge.

Malhotra, A., & Mir, F. (2012). *Punjab Reconsidered: History, Culture, and Practice*. New Delhi: Oxford University Press.

Manto, S. H. (1997). *Mottled Dawn: Fifty Sketches And Stories Of Partition* Penguin Global.

Marshall, J. (1951). *A Guide to Taxila*. Cambridge: Cambridge University Press.

Mascall, E. (1971). *All Change*. National Archives.

Meister, M. (2010). *Temples of the Indus*. Leiden: Brill.

Meller, H. E. (1977). Patrick Geddes and His Contribution to the Modern Town Planning Movement in Pre-independent India. *Urban and Regional Planning Thought*, Vol. 20. pp. 1-7.

Metcalf, T. R. (2002). *An Imperial Vision: Indian Architecture and Britain's Raj*. Delhi: Oxford University Press.

- Metta, V.B. (1923). The Revival of Indian Architecture. *The Builder*. Vol. 125.
- Miller, M. (1995). *Letchworth, Garden City*. Stroud, Gloucestershire: Chalford.
- Miller, M. (2002). *Letchworth: The First Garden City*. 2nd ed. Chichester: Phillimore.
- Mitter, P. (1986). The Early British Port Cities of India: Their Planning and Architecture, Circa 1640-1757. *Journal of the Society of Architectural Historians* 65. No. 2: pp. 95-114.
- Moorhouse, G. (1998). *To the Frontier*. London: Penguin Books.
- Morris, E. S. (1997). *British Town Planning and Urban Design. Principles and Policies*. London: Longman.
- Morris, J. (2005). *Stones of Empire, Buildings of the Raj*. Oxford: Oxford University Press.
- Mumtaz, K. (1985). *Architecture in Pakistan*. Singapore: Concept Media.
- Mumtaz, K. K. (1999). *Modernity and Tradition: Contemporary Architecture in Pakistan*. New York: Oxford University Press.
- Murphy, R. M. G. (1996). *Space, Class and Rhetoric in Lahore*. DPhil Dissertation University of Oxford.
- Nair, J. (1990). Uncovering the Zenana: Visions of Indian Womanhood in Englishwomen's Writings, 1813–1940. *Journal of Women's History*. Vol. 2, No. 1: pp. 8–34.
- Napier, C.J. (1853). *Defects, Civil and Military, of the Indian Government*. London, C. Westerton.
- Naz, N., & Ashraf, Z. (2008). Transformation of urban open spaces of Lahore: From Charing Cross to Faisal Square. *Pakistan Journal of Engineering and Applied Sciences*. Vol. 2: pp. 65-78.
- Nenova, T. (2010). *Expanding Housing Finance to the Underserved in South Asia: Market Review and Forward Agenda*. Washington: World Bank.
- Nevile, P. (2006). *Lahore: A Sentimental Journey*. New Delhi: Penguin Books.
- Nilsson, S. (1969). *European Architecture in India, 1750–1850*. New York: Taplinger.
- Nitzan-Shiftan, A. (2007). The Walled City and the White City: The Construction of the Tel Aviv/ Jerusalem Dichotomy. *Perspecta*, Vol. 39 (Re-Urbanism: Transforming Capitals), pp.92-104.
- O'Malley L.S.S. (1965). *Indian Civil Service, 1601-1930*. London: Frank Cass and Co.
- O'Connor, L. C. (1996). *From london to lahore: Memsahibs and the victorian ideal*. PhD dissertation Cornell University.
- Osborn, F.J and Whittack, A. (1963). *New Towns*. London: McGraw-Hill.

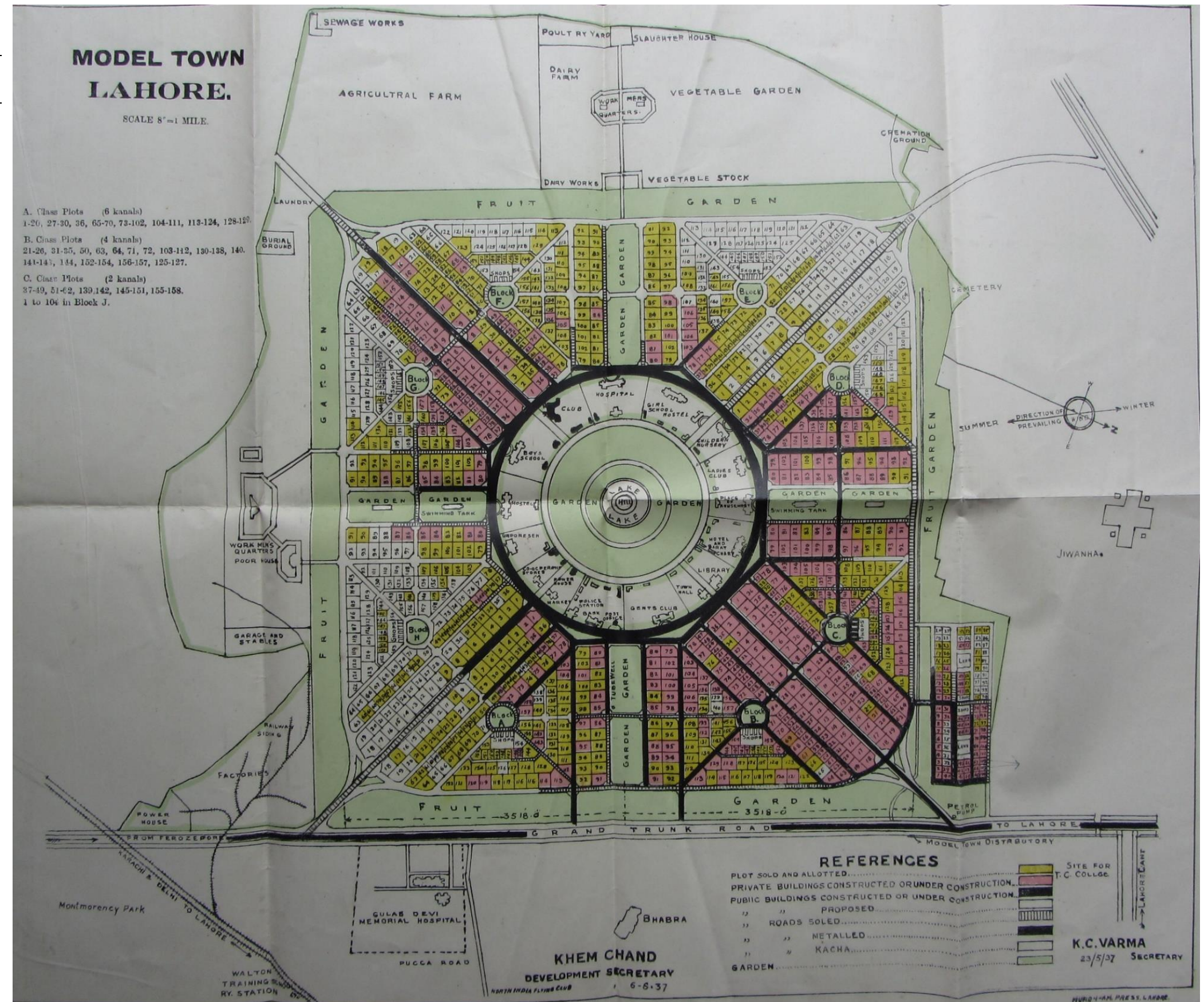
- Osborn, F.J. (1942). *The New Towns after the War*. 2nd ed. London: J.M. Dent.
- Peile, J. (1913). *Biographical Register of Christ's College, 1505-1905: and of the earlier foundation, God's House, 1448-1505*. Vol. II 1666-1905. Cambridge: Cambridge University Press.
- Playne, S. Bond, J.W. and Wright, A. (1914). *Southern India: Its History, People, Commerce and Industrial Resources*. London: The Foreign and Colonial Compiling and Publishing Co.
- Punjab Co-operative Department. (1945). *Consolidated Circulars of the Co-operative Department*. Lahore: Superintendent, Government Printing.
- Quraeshi, S. (1988). *Lahore, The City Within*. Singapore: Concept Media.
- R.A.F. (1893). Electrical Cooking. *Science*. Vol. 22. No. 554 (Sep. 15): pp. 146-148.
- Rajput, A. (1963). *Architecture in Pakistan*. Karachi: Pakistan Publications.
- Ram, G. (1927). *Pocketbook of Civil Engineering*. 5th ed. Lahore: Civil and Military Gazette Press.
- Rasheed, A. (1907). *The Travellers Companion (Indian Railways)*. Calcutta: Superintendent of Government Printing.
- Rehman, A. (2013). *Mapping Lahore: Tracing Historical Geography of a City through Maps*. Lahore: Al-Meezan Publications.
- Robinson, E. K. (1896). Kipling in India, Reminiscences by the Editor of the Newspaper on Which Kipling Served at Lahore. *McClure's Magazine*. Vol VII.
- Roux, H.L. (2003). The Networks of Tropical Architecture. *The Journal of Architecture* 8: pp.337-54.
- Rubin, D. (1986). *After The Raj*. Hanover: University of New England Press.
- Rubin, H. J. and Rubin, I. S. (2012). *Qualitative Interviewing: The Art of Hearing Data*. London: Sage.
- Rudduck G. (1961). *Towns and Villages of Pakistan. A Study*. Karachi: Government of Pakistan Planning Commission.
- Said, E. (1979). *Orientalism*. New York: Vintage Books.
- Scott, M. (1969). *American City Planning Since 1890*. Berkeley: University of California Press.
- Scriver, P. and Prakash, V. (2007). *Colonial Modernities: Building, Dwelling and Architecture in British India and Ceylon*. London: Routledge.
- Shibli, R. Powell, P.W.J and Geddes, P. (1965). *Urban Improvements. A Strategy for Urban Works*. Karachi: Government of Pakistan, Planning Commission.
- Sidhwa, B. (ed.). (2005). *City Of Sin and Splendour: Writings on Lahore*. New Delhi: Penguin Books.

- Silverman, S. (2007). *Vastu: Transcendental Home Design in Harmony with Nature*. Layton, Utah: Gibbs Smith.
- Silverstone, R. (2012). *Visions of Suburbia*. London: Routledge.
- Singh, K. (2003). *Truth, Love and a Little Malice: An Autobiography*. New Delhi: Penguin Books.
- Smyth, G.M.C. (1847). *A History of the Reigning Family of Lahore*. Calcutta: Thaker.
- Spurr, D. (1993). *The Rhetoric of Empire: Colonial Discourse in Journalism, Travel Writing, and Imperial Administration*. Durham, NC, USA: Duke University Press.
- Stalley, M. (1972). *Patrick Geddes, Spokesman for the Man and the Environment*. New Brunswick, N.J.: Rutgers University Press.
- Stephenson, J. (2001). *Women in Nazi Germany*. Harlow: Longman.
- Stratton, A.W. and Stratton, A.B. (1908). *Letters from India*. London: Archibald Constable and Co.
- Sturgess, H.A.C. (1949). *Register of Admissions to the Honourable Society of the Middle Temple, from the fifteenth century to the year 1944*. Vol. II. London: Butterworth.
- Sullivan, B.M. (1929). *Punjab P.W.D Paper No. 79*. Lahore: Government Printing.
- Suvorova, A. A. (2011). *Lahore: Topophilia of Space and Place*. Karachi: Oxford University Press.
- Talbot, I. (1988). *Punjab and the Raj, 1849–1947*. Riverdale, Md.: Riverdale Company.
- Talbot, I. (2007). A Tale of Two Cities: The Aftermath of Partition for Lahore and Amritsar 1947–1957. *Modern Asian Studies*. Vol.41. pp 151-185.
- Tandon, P. (1968). *Punjabi Century 1857-1947*. London: Chatto and Windus.
- Tandon, P. (1968). *Punjabi Century 1857-1947*. London: Chatto and Windus.
- Thornton, T., & Kipling, J. (1876). *Lahore as it was*. Lahore: Government Civil Secretariat Press.
- Tillotson, G. H. R. (1989). *The Tradition of Indian Architecture: Continuity, Controversy, and Change since 1850*. New Haven: Yale University Press.
- Tillotson, G. H. R. (1991). Indian Architecture and the English Vision. *South Asian Studies*. Vol. 7. No.1: pp. 59-74.
- Ullah A. (1937). *The Co-operative Movement in the Punjab*. London: G. Allen and Unwin.
- Unknown Author. (1849). National Evils and Practical Remedies from Alloa August 1849. *Knowsley Pamphlet Collection*, contributed by University of Liverpool to JSTOR.

- Unknown Author. (1870). *Street's Indian and Colonial Mercantile Directory for 1870*. London: G. Street.
- Unknown Author. (1884). Societies. *British Architect*. Vol 21. No 21: pp. 255-258.
- Unknown Author. (1912). The New Capital of India. *The Town Planning Review*. No. 4.
- Unknown Author. (1913). The Ideal Home Exhibition. *Journal of the Royal Society of the Arts*. Vol. 61. No. 3180 (October 31).
- Unknown Author. (1920). *Christ's College Boys Home and Club Report*. (Annual Report). Cambridge: Cambridge University Press.
- Unknown Author. (1993). *The Partition of the Punjab 1947*. Vol. 1. Lahore; Sang-e-Meel Publications
- Unwin, R. (1912). *Nothing Gained by Overcrowding*. London: P.S. King and Sons.
- Vale, L. J. (1992). *Architecture, Power, and National Identity*. New Haven: Yale University Press.
- Vandal, P and Vandal S. (2006). *The Raj, Lahore and Bhai Ram Singh*. Lahore: NCA Publications.
- Vandal, P. (ed.) (2011). *Historiography of Architecture of Pakistan and the Region*. Lahore: THAAP.
- Voll, J. O. (2010). *Modernism: Oxford Bibliographies Online Research Guide*. Oxford: Oxford University Press.
- Wace, F. B. (1939). *Report on the Co-Operative Movement in the Punjab*. Lahore: Government Printing.
- Wahrman, D. (1995). *Imagining the Middle Class: The Political Representation of Class in Britain, c. 1780-1840*. Cambridge: Cambridge University Press.
- Walsh, J. E. (2004). *Domesticity In Colonial India: What Women Learned When Men Gave Them Advice*. Lanham (MD): Rowman & Littlefield Publishers.
- Ward, S.V. (1992). *The Garden City*. London: E & FN Spon.
- Ward, S.V. (1998). *Selling Places: The Marketing and Promotion of Towns and Cities, 1850-2000*. London: E and FN Spon.
- Welter, V. M., & Whyte, I. B. (2003). *Biopolis: Patrick Geddes and the City Of Life*. Cambridge, Massachusetts: MIT Press.
- Wescoat, J. and Wolschke-Bulmahn, J. (1996). *Mughal Gardens: Sources, Places, Representations, and Prospects*. Washington: Dumbarton Oaks.
- Wheeler, J.T. (1884). *Early Records of British India: A History of the Settlements in India*. London: Curzon Press.
- Wheeler, M. (1966). *Indus Valley Civilization*. London: Thames and Hudson.

- Whitley, J.H. (1931). *Report of the Royal Commission on Labour in India*. Vol. 15. London: HM Stationery Office.
- Wilk, C. (ed.) (2006). *Modernism Designing a New World*. London: V & A Publications.
- Williams, P. and Chrisman, L. (ed.) (1994). *Colonial Discourse and Post-Colonial Theory: A Reader*. New York: Columbia University Press.
- Wright, F.L. (1935). Broadacre City: A New Community Plan. *Architectural Record*. Vol. 77, April 1935.
- Yeoh, B.S.A. (2003). *Contesting Space: Power Relations and the Urban Built Environment in Colonial Singapore*. Kuala Lumpur: National University of Singapore Press.
- Young, R.J.C. (2003). *Colonial Desire. Hybridity in Theory, Culture and Race*. London: Routledge.

1937.



Annexure 2: List Of Model Town Members 1922.

S. No.	Name	Details	Profession	Permanent Address	Qualifications	Knight-hood	Religion
1	Agha Abbas Mirza Khan		Unknown	Karnal			Muslim
2	K.B. Khan Abdul Ghafur Khan	Khan Of Ziada, District And Sessiond Judge	I.C.S, Judge	Gujranwala	I.C.S	K.B.	Muslim
3	Mr. K.D.Abdul Gafur	Balochistan Sports Works	Businessman	Sialkot			Muslim
4	Mian Abdul Haye	Vakil And President Municipal Committee	Lawyer	Ludhiana	B.A., L.L.B		Muslim
5	Sheikh Abdul Karim	Vakil High Court	Lawyer	Lyallpur	B.A., L.L.B		Muslim
6	The Hon'able Mr. Justice Abdul Qadir K.B.	Judge High Court	I.C.S, Judge	Lahore	I.C.S	K.B.	Muslim
7	Mrs. Abdul Qadir	Fane Road	Housewife	Lahore			Muslim
8	Sheikh Abdul Qadir	H.V.C.Commissioner's Office	I.C.S	Rawalpindi	I.C.S		Muslim
9	K.B. Dr. Abdul Rahman	Civil Surgeon	Doctor	Etah	M.B.B.S	K.B.	Muslim
10	Mr. Abdul Rahman	Asstt. Executive Engineer	I.C.S Engineer	Rura (U.P.)	I.C.S		Muslim
11	K.B. S. Abdul Rashid	Dy. Supdt. Of Police	I.C.S	Lahore	I.C.S	K.B.	Muslim
12	Shaikh Abdul Wahid	Govt. Pleader	Lawyer	Hissar			Muslim
13	Shaikh Abdul Wahid	S.I. Police	I.C.S	Ghul Khurd	I.C.S		Muslim
14	Mr. Aftab Rai		Lawyer	Lahore Cantt	Bar-At-Law		Muslim
15	K.B. Agha Ali Raza Khan	Supdt. Of Police	I.C.S	Karnal	I.C.S	K.B.	Muslim
16	Mr. Z. D. Ahmad	Distt. Supdt. Of Police	I.C.S	Sind	M.A., L.L.B.		Muslim
17	Mian Ahmad Said	Indian Post Offices	I.C.S	Batala	I.C.S		Muslim
18	M. Ali Assadullah	Kila Gujar Singh	Unknown	Lahore			Muslim
19	Shaikh Ali Bakhsh	Pleader	Lawyer	Sialkot			Muslim
20	Sirdar Ajit Singh	Messrs Jai Singh And Sons Chemists	Businessman	Lahore			Sikh

21	Ch. Ali Mohammad	Inspector Co-Operative Societies	I.C.S, Co-Operative Societies	Montgomery	I.C.S		Muslim
22	Malik Ali Bakhsh	Timber Merchant	Timber Merchant	Lahore			Muslim
23	Riazada Amar Chand	Reis	Reis	Dera Ismail Khan			Hindu
24	Mr. Amar Nath Savara	Asstt. Executive Engineer	I.C.S Engineer	Campbellpur	I.C.S		Hindu
25	Lala Amar Nath Sud	Asstt. Executive Engineer	I.C.S Engineer	Mardan	I.C.S		Hindu
26	R.B. Diwan Amar Nath Nanda	Asstt. Sanitary Engineer Punjab	I.C.S Engineer	Lahore	I.C.S	R.B.	Hindu
27	Lala Amir Chand	Head Master, Govt. High School	School Teacher	Jullundur			Hindu
28	Sant Amir Chand	Broker	Businessman	Peshawar			Hindu
29	Lala Amlak Ram Sethi	Kucha Peer Bhola	Unknown	Lahore			Hindu
30	Capt. R. R. Anand	Asst. Surgeon	Doctor	Talagong	M.B.B.S		Hindu
31	Lala Anand Parkash	II Master, Govt. High School	School Teacher	Peshawar			Hindu
32	L. Anand Ram	Vakil	Lawyer	Sialkot	B.A., L.L.B		Hindu
33	Diwan Anant Ram		Unknown	Kohat			Hindu
34	Sardar Arjan Singh	Asst. Surgeon	Doctor	Sirsa	M.B.B.S		Sikh
35	K.S. Mirza Asghar Ali	Civil Surgeon	Doctor	Sheikhupura		K.S.	Muslim
36	Mrs. A. B. Asghar Ali	Civil Surgeon	Doctor	Sheikhupura			Muslim
37	Dr. Attaullah Butt	Medical Officer, Muslim University	Doctor	Aligarh	M.B.B.S		Muslim
38	Mr. Attaullah Khan	Supdt. Post Offices	I.C.S	Bareilly			Muslim
39	Dr. Aya Ram Bhatin	Medical Practitioner	Doctor	Bannu	M.B.B.S		Hindu
40	Sayad Bahadur Shah	Zamindar	Reis	Samundri			Muslim
41	Sardar Bahal Singh	Reis And Zamindar	Reis	Jhangasingh Wala P.O. Worsleygunj			Sikh
42	Lala Baij Nath Chopra	Chief Agent All India United Insurance Co.	Businessman	Lahore			Hindu
43	Rai Sahib Bakhshi Ram	Chief Forest Officer	I.C.S	Quetta	I.C.S	R.S.	Hindu
44	Lala Bal Kishen	Registrar Co-Operative Societies	I.C.S, Co-Opertaive Societies	Ajmer	I.C.S		Hindu
45	Mr. Balak Ram	District And Sessions Judge	I.C.S, Judge	Sukkar	I.C.S		Hindu

46	Mr. Balak Ram		Lawyer	Lahore	Bar-At-Law		Hindu
47	Mr. P.N. Bali	Sub. Asst. Surgeon	Doctor	Gidarbaba			Hindu
48	Pandit D. N. Bali	Photographer	Photographer	Lahore			Hindu
49	Mr. Balikishen Das Seth	Colliery Agent	Businessman	Bombay			Hindu
50	Bhagat Balwant Lal	The Anchorage	The Anchorage	Lahore			Sikh
51	Sardar Balwant Singh Shihn	Asst. Executive Engineer	Engineer	Jullundur			Sikh
52	Sirdar Balwant Singh Garewal	S.D.O.	I.C.S	Pind Dadan Khan	I.C.S		Sikh
53	Mr. G. S. Bambah	Lakhanwal	Unknown	Gujrat			Hindu
54	R.S. Barkat Ram Khosla	Vakil High Court	Lawyer	Ferozepur	B.A., L.L.B	R.S.	Hindu
55	Mr. S. Bashi Ram	Executive Engineer (P.W.D)	Engineer	Lahore	M.A., A.K.C		Hindu
56	Lala Bashi Ram	Overseer (P.W.D)	I.C.S	Lahore			Hindu
57	Dr. G.L. Patra	Dy. Sanitary Commissioner Bengal	I.C.S	Calcutta			Hindu
58	Mr. Bali Ram	S.D.O. (Railways)	I.C.S	Rohri			Hindu
59	Mr. M. S. Bhagat		Lawyer	Lahore	Bar-At-Law		Hindu
60	Mr. S. S. Bhagat	District Engineer	Engineer	Allahabad			Hindu
61	Capt. M. L. Bhagat	I.M.S.	I.M.S	Unknown			Hindu
62	Dr. Bhagat Ram Khanna	Medical Officer Tuberculosis Institute	Doctor	Lahore	M.R.C.S, L.R.C.P.		Hindu
63	Lt. B.L.Bhandari	A.R.C.C.	I.M.S	Quetta			Hindu
64	Dr. Bhagwan Dass Taneja	Asst. Surgeon Civil Hospital	Doctor	Chaniot			Hindu
65	Sirdar Bhagwan Singh	Court Sub-Inspector	I.C.S	Unknown			Sikh
66	Chaudhri Bhagwan Singh	Reis	Reis	Shujabad			Hindu
67	Lala Bhawani Das Katyal	Retired Forest Officer	Retired I.C.S	Maghiana			Hindu
68	Sirdar Bholla Singh Baknian	Manouli House	Unknown	Ambala			Sikh
69	Lala Behari Lal	Sub. H.C. Office Of Chief Auditor	Clerk	Lahore			Hindu
70	Dr. Bikramjit Sahni		Doctor	Lahore	D.P.H, L.R.C.P &S.		Hindu
71	Capt. Bishamber Math Luthra	I.M.S.	I.M.S	Lahore			Hindu
72	Mehta Bishen Das Leo	H.S. Keeper	Govt. Officer	Pind Dadan Khan			Hindu

73	Bhai Bishen Das Puri	Reporter On Books Punjab Education Department	I.C.S	Lahore			Hindu
74	Mrs. Bishen Rozdon	Baboo Mohalla	Housewife	Quetta			Hindu
75	R.S. Pt. Bisheshwar Nath Razdan	Audit Officer	I.C.S	Lahore		R.S.	Hindu
76	Mr. Bodh Raj Sahni		Lawyer	Ferozepur	B.A., L.L.B, Bar-At-Law		Hindu
77	Ms. M. Bose	Lady Superintendent Victoria May Girls School	School Teacher	Lahore			Hindu
78	Diwan Brij Lal	Reis	Reis	Eimenabad			Hindu
79	Diwan Brij Lal Bhalla	I.M.S., Chief Medical Officer	I.M.S, Doctor	Jammu			Hindu
80	Pt. Brij Lal Trakru	Machhi Hatta	Businessman	Lahore			Hindu
81	Dr. Chaman Lal	Civil Surgeon	Doctor	Mianwali			Hindu
82	Diwan Chaman Lal		Lawyer	Bombay	Bar-At-Law		Hindu
83	Mr. G.D. Ghandiok		Unknown	Lahore			Hindu
84	Pt. Charan Das	Proprietor Punjab Printing Works	Publisher	Lahore			Hindu
85	Major R.N. Chopra	I.M.S.	I.M.S	Calcutta			Hindu
86	R.S. Chuni Lal	Official Receiver	I.C.S	Lahore	M.A., L.L.B.	R.S	Hindu
87	Lala Dalbir Chand Chopra	Timber Merchant	Timber Merchant	Jhelum			Hindu
88	Mrs. Dalip Singh	The Palms	Housewife	Lahore			Sikh
89	Sirdar Darshan Singh Of Vahali	I.A.S, Dy. Director Of Agriculture	I.C.S	Hansi			Sikh
90	D.B. Diwan Daulat Rai	Advocate	Lawyer	Rawalpindi		D.B., C.I.E.	Hindu
91	Mr. Daulat Rai	Supt. R.M.S.	Govt. Officer	Lahore			Hindu
92	Diwan Daulat Ram	Reis	Reis	Eimenabad			Hindu
93	Mr. A. R. Davar	M.D. Calcutta Industrial Bank Ltd.	Banker	Calcutta			Hindu
94	Mrs. Davar	4 Buckingham Road	Housewife	Calcutta			Hindu
95	Sir. Daya Kishen Kaul	Chief Minister	I.C.S	Patiala		Sir, K.B.E., C.I.E, D.B.	Hindu

96	Mr. Daya Krishna Khanna	Asst. Executive Engineer	Engineer	Sargodha			Hindu
97	Lala Daya Ram Mehta	Pleader	Lawyer	Khushab			Hindu
98	R.B. Daya Ram Sahni	M.R.A.S. Archeological Survey	I.C.S	Lahore		R.B.	Hindu
99	Lala Deoki Nandan Batra	Munsif	Judge	Jhang			Hindu
100	Lala Deoki Nandan	P.W.D. Accountant	Govt. Officer	Dharamsala			Hindu
101	Prof. Devi Dayal	D.A.V. College	College Teacher	Lahore	B.A.		Hindu
102	R.S. Devi Dayal	Dy. Examiner Military Accounts	Military Civilian	Lahore		R.S.	Hindu
103	R.S. Devi Dayal	Dy. Supdt. Of Police	I.C.S	Ferozepur		R.S.	Hindu
104	Mr. Dev Raj Sawhney		Lawyer	Lahore	B.A., L.L.B, Bar-At-Law		Hindu
105	Malik Dewa Singh	Colliery Owner	Businessman	Abbottabad			Sikh
106	Mr. R. N. Dewan	Asst. Engineer, Impereial Works	Engineer	Delhi			Hindu
107	Mr. Dhan Raj Sawhney	Executive Engineer	Engineer	Hyderabadd			Hindu
108	S. Dhana Singh	Factory Owner	Businessman	Nankana			Sikh
109	Lala Dhani Ram Kapila	Chief's College	College Teacher	Lahore	B.A.		Hindu
110	Lala Dhanpat Rai	Head Master, Govt. High School	School Teacher	Kamalia	B.A.		Hindu
111	Dr. Dilbagh Rai	Sub-Assistant Surgeon	Doctor	Jabbalpur			Hindu
112	Sh. Din Muhammad	Judge Small Cause Court	Judge	Delhi	M.A.		Muslim
113	Lala Dina Nath Bhalla	Nisbet Road	Businessman	Lahore	B.Sc.		Hindu
114	R.S. Lala Diwan Chand Sibal			Quetta		R.S.	Hindu
115	Dr. Diwan Chand Trikha	Medical Practitioner	Doctor	Maghiana	M.B.B.S		Hindu
116	S.B. Sirdar Diwan Singh Duggal	Civil Surgeon	Doctor	Lyallpur	M.B.B.S	S.B.	Sikh
117	Mr. Duni Chand		Lawyer	Lahore	Bar-At-Law		Hindu
118	Mr. D. Dutt	Engineer	Engineer	Sukkar			Hindu
119	Mehta Dwarka Nath	Senior Sub Judge	Judge	Rohtak	B.A., L.L.B		Hindu
120	R.S. Seth Dwarka Nath	Dy. Supdt. Of Police	I.C.S	Rawalpindi		R.S.	Hindu
121	Mr. Fakhur-Ud-Din	Asst. Engineer.	Engineer	Tahir			Muslim
122	Shahzada Farukh Alam	Inspector Of Railway Police	I.C.S	Lahore			Muslim

123	K.S. Malik Fateh Khan Nun	Asst. Registra Co-Operative Societies Punjab	I.C.S,Co-Operative Societies	Lahore		K.S.	Muslim
124	K.B. Mian Fazal-I-Hussain	Minister Of Education Punjab	I.C.S	Lahore		K.B.	Muslim
125	Mrs. Fazal-I-Hussain	Lytton Road	Housewife	Lahore			Muslim
126	Mr. Fazl-Ud-Din	B.O.L., Pleader	Lawyer	Gujranwala			Muslim
127	Dr. Sh. Feroze-Ud-Din	Supt. And Medical Officer T.B. Jail	Doctor	Shahpore			Muslim
128	Hafiz Feroze-Ud-Din Ahmad	Retired Inspector Of Police	Retired I.C.S	Lahore			Muslim
129	Sirdar Ganda Singh Soni	Vakil	Lawyer	Gurdaspur			Sikh
130	Major Ganga Bishen	I.M.S. Assistant Surgeon	I.M.S, Doctor	Lyallpur			Hindu
131	R.B. Ganga Ram		I.C.S Engineer	Lahore	C.I.E., M.V.O., M.I.C.E., M.I.M.E	R.B.	Hindu
132	Lala Ganga Ram Kapur	Vakil High Court	Lawyer	Lahore			Hindu
133	Dr. Ganga Ram Nagpaul	Eye Specialist	Doctor	Lahore			Hindu
134	Prof. Ganga Ram Kohli	Dyal Singh College	College Teacher	Lahore	M.A.		Hindu
135	Lala Ganga Ram	Koocha Deputy Aziz Din, Hall Gate	I.C.S	Amritsar			Hindu
136	Lt. Col. Ganpat Rai	I.M.S.	I.M.S	Simla			Hindu
137	Mr. Ganpat Rai		Lawyer	Lahore	Bar-At-Law		Hindu
138	Prof. Pt. Ganpat Rai Sharma	Govt. College	College Teacher	Multan			Hindu
139	Lala Gian Chand	Permanent-Way Inspector	I.C.S	Dhariwal			Hindu
140	R.S. Lala Gian Chand Sethi	Executive Engineer	I.C.S	Multan		R.S	Hindu
141	Sirdar Gian Singh	Munsif	Judge	Chaniot	B.A.		Sikh
142	Mian Ghulam Mohiy-Ud-Din	Retired Supdt. Of Police	Retired I.C.S	Jullundur			Muslim
143	Mr. F.N. Ghulam Mohi-Ud-Din (Late)	Chief Good's Clerk	Clerk	Amritsar			Muslim
144	Ch. Ghulam Mustafa		Govt. Officer	Jhang	B.A.; E.A.C		Muslim
145	Dr. Gokal Chand Narang		Lawyer	Lahore	M.A., Ph.D., Bar-At-Law		Hindu
146	Sant Gokal Chand	D.A.V. School	School Teacher	Lahore	B.A.		Hindu
147	Diwan Gokal Lal Chopra	Reis	Reis	Akalgarh			Hindu

148	Sardar Gopal Singh	State Engineer	Engineer	Chamba			Sikh
149	Raizada Seth Gopal Chand		Reis	Dera Ismail Khan			Hindu
150	Bhagat Govind Das	Secretary Punjab National Bank	Banker	Lahore	M.A., L.L.B.		Hindu
151	M. Gul Mohammad Khan	E.A.C., Treasury Officer	Govt. Officer	Dera Ismail Khan			Muslim
152	Khan Gul Muhammad Khan	Vakil High Court	Lawyer	Ferozepur			Muslim
153	Pt. J. Gulleri	Asst. Professor Agricultural College	College Teacher	Lyallpur			Hindu
154	Messrs Gurmukh Singh And Bros.	Ganpat Road	Businessman	Lahore			Sikh
155	Lt. Gurbachan Singh	I.M.S.	I.M.S	Chamba			Sikh
156	Sardar Gurcharan Singh		Unknown	Barnala			Sikh
157	Sirdar Gursaran Singh	Head Lecture Assistant Government College	College Teacher	Lahore			Sikh
158	Sirdar Habib-Ullah Khan		Lawyer	Lahore	Bar-At-Law		Muslim
159	Sirdar Hakim Singh	Registrar Co-Operative Societies	I.C.S,Co-Operative Societies	Jammu And Kashmir States			Sikh
160	Mr. Hans Raj Anand	Asst. Executive Engineer	Engineer	Chuharkana			Hindu
161	Lala Hans Raj	Military Finance Department	Military Civilian	Simla			Hindu
162	Lala Har-Dayal	Sub-Judge	Judge	Campbellpur			Hindu
163	Lala Har Gobind	E.A.C., Income Tax Collector	I.C.S	Amritsar			Hindu
164	Lala Hari Chand	Revenue And Agriculture Department	I.C.S	Delhi			Hindu
165	Lala Harish Chander Syal	Victuallizing Agent S. & T. Corps	Businessman	Rawalpindi			Hindu
166	Mr. Hari Ram	Ganga Niwas	Unknown	Lahore			Hindu
167	Lala Hari Ram Gorowala	Government Pensioner And Zamindar	Retired Govt Officer	Ramsar (C.I.)			Hindu
168	Diwan Harnam Das	Tahsildar	Govt. Officer	Batala			Hindu
169	Mrs. Harnam Singh	The Anchorage	The Anchorage	Lahore			Sikh
170	Bibi Harminder Kaur		Housewife	Chamba			Sikh
171	Lala Hira Lal	Head Clerk Dy. Commissioner's Office	Clerk	Bannu			Hindu

172	Lala Hira Nand Shastri	Supt. Of Epigraphy	Govt. Officer	Ootacommund			Hindu
173	Lala Hukum Chand	Pleader	Lawyer	Bannu			Hindu
174	Mirza Hussain Ali	Sub-Inspector Of Police	I.C.S	Montgomery			Muslim
175	Mr. Hussain Bakhsh	Tailor Master	Tailor	Lahore			Muslim
176	Mr. S. M. Illahi	Engineer Supt. Grey Canal	Engineer	Ferozepur			Muslim
177	K.B. Maulvi Inam Ali	Retired Sessions Judge	I.C.S Retired Judge	Lahore		K.B.	Muslim
178	Lala Ishar Das Mehta	Deputy Collector (Irrigation)	I.C.S	Jagraon			Hindu
179	Prof. Ishar Chander Nanda	Government College	College Teacher	Multan			Hindu
180	Sirdar Ishar Singh Hussainwalia	Telegraph Master	I.C.S	Lahore			Sikh
181	Bhagat Ishwar Das	The Anchorage	The Anchorage	Lahore			Hindu
182	Mr. A. M. Jafar	Asst. Engineer	Engineer	Kulu			Muslim
183	Bhagat Jagan Nath	Senior Sub Judge	Judge	Delhi			Hindu
184	Lala Jagan Nath	Prime Minister	Govt. Officer	Idar State			Hindu
185	Lala Jagan Nath	Deputy Examiner Field Controller's Office	I.C.S	Dera Ismail Khan			Hindu
186	Sirdar Jagat Singh	Retired Forest Officer And Zamindar	Retired I.C.S	Perowal			Sikh
187	Sirdar Jagat Singh	Ahluwalia	Unknown	Abbottabad			Sikh
188	Lala Jagdish Lal Kapur	Asst. Surgeon	Doctor	Palampur	B.Sc., M.B.B.S		Hindu
189	Bhagat Jagdish Lal	The Anchorage	The Anchorage	Lahore			Hindu
190	Prof. Jai Chand Luthra	Punjab Agricultural College	College Teacher	Lyallpur	M.Sc		Hindu
191	Lala Jai Ram	Executive Engineer	Engineer	Bhera			Hindu
192	Sh. Jalal-Ud-Din	Assistant Punjab Irrigation Secretariat	I.C.S	Lahore			Muslim
193	Capt. Jamal-Ud-Din	I.M.S.	I.M.S	Unknown			Muslim
194	M. Jalal-Ud-Din	Military Contractor	Contractor	Lahore			Muslim
195	Capt. Jamna Das	I.M.S.	I.M.S	Amritsar			Hindu
196	R.S. Pt. Jawala Parsad	Public Prosecutor	Lawyer	Lahore		R.S.	Hindu
197	Shrimati Jaswant Kaur	Gurdiyal Niwas	Businessman	Amritsar			Sikh

198	R.S. Lala Jhinda Ram	Vakil	Lawyer	Dera Ismail Khan		R.S.	Hindu
199	Lala Jodha Ram	Inspector Of Works	I.C.S	Quetta			Hindu
200	Lala Kahan Chand	Vakil High Court	Lawyer	Gujranwala			Hindu
201	Mr. J. M. Kakar	Messrs Kakar And Sons	Businessman	Rawalpindi			Hindu
202	K.S. Khan Kalander Ali Khan	Public Prosecuter	Lawyer	Jhang	B.A., L.L.B	K.S.	Muslim
203	Lala Kanshi Ram	E.A.C	Govt. Officer	Kasur			Hindu
204	Lala Kanshi Ram	Proprietor Kanshi Ram Press	Publisher	Lahore			Hindu
205	Lala Kapoor Chand Bhandari		Lawyer	Ferozepur	Bar-At-Law		Hindu
206	Dr. Karam Singh	Gawalmandi	Doctor	Lahore	L.R.C.P & S.		Sikh
207	Mr. Karamat Ullah	Chief's College	College Teacher	Lahore			Muslim
208	Sirdar Kartar Singh	Inspector Co-Operative Societies	I.C.S, Co-Opertaive Societies	Lyallpur	B.A.		Sikh
209	Prof. Bawa Kartar Singh	Ravenshaw College	College Teacher	Cuttuck	M.A.		Sikh
210	Sirdar Kartar Singh	Asst Surgeon	Doctor	Lahore			Sikh
211	Dr. Kewal Kishen Mehta	Asst. Surgeon Civil Hospital	Doctor	Jullundur			Hindu
212	Capt. A. R. Khanna	I.M.S.	I.M.S	Abbottabad			Hindu
213	Diwan Khem Chand		Lawyer	Lahore	Bar-At-Law		Hindu
214	Capt. R. L. Khera	I.M.S. House Physician Mayo Hospital	I.M.S., Doctor	Lahore			Hindu
215	Capt. R. N. Khosla	I.M.S.	I.M.S	Sialkot			Hindu
216	Maj. Malik Nawab Khuda Bakhsh Khan Tiwana	Revenue Member	I.M.S	Bahawalpur		C.I.E. Izzatnishaan	Muslim
217	Sh. Khurshid Ahmad	Timber Merchant	Timber Merchant	Jhelum			Muslim
218	Munshi Khurshaid Alam	C.O.C		Sialkot			Muslim
219	Rai Khushal Chand Bhandari	Retired Engineer	Retired Engineer	Naina Kot			Hindu
220	Lala Kider Nath Bhandari	Sessions Judge	Judge	Idar State	B.A.		Hindu
221	Messrs Kirparam Brijlal	Mill Owners	Businessman	Okara			Hindu
222	Lala Kishen Chand	Station Master	Govt. Officer	Nushki			Hindu

223	R.S. Ch. Kishan Das	Honorary Magistrate	I.CS Judge	Bannu		R.S.	Hindu
224	Capt. Kirpal Singh Thappar	I.M.S	I.M.S	Unknown			Sikh
225	R.S. Kundan Lal	Vakil	Lawyer	Hoshiarpur		R.S.	Hindu
226	Mr. A.M. Kureishy	Reader In Mathematics Muslim University	University Teacher	Aligarh			Muslim
227	Lala Labha Ram Seth	S.D.O.	I.C.S	Karnal			Hindu
228	Lala Lachhman Das	Pleader	Lawyer	Sirsa			Hindu
229	Lala Lachhmi Narain	Vakil High Court	Lawyer	Lahore	B.A., L.L.B		Hindu
230	Bhagat Lakhman Singh	Inspector Of Schools	I.C.S	Ludhiana			Sikh
231	Lala Lakhshmi Narain	Inspector Of Post Offices	I.C.S	Bhimbar			Hindu
232	S.B. Lakhmir Singh	Asst. Commissioner	I.C.S	Agra	M.A.	S.B.	Sikh
233	S. Lakhmir Singh	Contractor	Contractor	Abbottabad			Sikh
234	Lala Lajput Rai Sahni		Politician	Lahore	B.A.		Hindu
235	Sh. Laiq Ali	Munsif	Judge	Multan	B.A.		Muslim
236	Shrimati Lajwanti Obhrai		Housewife	Peshawar			Hindu
237	Mr. I. C. Lall	Retired Deputy Commissioner	Retired I.C.S	Lahore	M.A., I.S.O		Hindu
238	Dr. Lal Chand	Dentist	Doctor	Lahore			Hindu
239	R.S. Lal Chand Bhatia	S.D.O.	I.C.S	Dharamsala		R.S.	Hindu
240	Prof. Lal Chand Nayyar	Central Training College	College Teacher	Lahore	M.Sc., B.T,		Hindu
241	Maj. Abdul .Rehman. Lauddie	I.M.S., Civil Surgeon	I.M.S Doctor	Sialkot			Muslim
242	S.B. Sirdar Lehna Singh	Executive Engineer	I.C.S Engineer	Jullundur		S.B.	Sikh
243	R.B. Sirdar Lehna Singh	Census Superintendent	I.C.S	Peshawar	M.B.E	R.B.	Sikh
244	Pt. Madan Lal Trakru		Pandit	Lahore			Hindu
245	Malik Mahdi Ali Khan	Circle Inspector Of Police	I.C.S	Gurdaspur			Muslim
246	R.B. Makhan Lal	Executive Engineer	I.C.S Engineer	Jammu		R.B.	Hindu
247	Lal Makhan Mall Guruwara	Kucha Ganga Shah	Businessman	Lahore			Hindu
248	Lala Mangal Sain	Supervisor Canal Offices	I.C.S	Bhatinda			Hindu
249	Bhai Manohar Lal	Reis Mori Gate	Reis	Lahore			Hindu

250	Lala Manohar Lal Puri	D.I.G. Police	I.C.S	Hyderabad Deccan			Hindu
251	R.B. Pandit Manmohan Nath Kaul	S.D.O.	I.C.S	Khushab		R.B.	Hindu
252	Mr. Manohar Lal Bhargava	Ice Machionery Mart	Businessman	Lahore			Hindu
253	Mr. Manohar Lal Sahni	Rattigan Road	Unknown	Lahore			Hindu
254	Syed Moratab Ali Shah	Punjab House	Businessman	Lahore			Muslim
255	Mr. E. Mayadass	Secretary District Board	I.C.S	Ferozepur			Hindu
256	Khwaja Mazhar Hussain	Timber Merchant	Timber Merchant	Amritsar	B.A., L.L.B.		Muslim
257	Prof. Mehr Chand Sethi	F.C. College	College Teacher	Lahore	M.A.		Hindu
258	R.B. Milkhi Ram			Lahore		R.B., C.I.E.	Hindu
259	Mian Mohammed Abdullah	Asst. Surgeon	Doctor	Bhakkar			Muslim
260	Mr. Mohammed Abdul Ghani	District And Sessions Judge	Judge	Aligarh			Muslim
261	K.B. Mohammed Abdul Karim	District And Sessions Judge	I.C.S Judge	Dera Ismail Khan		K.B.	Muslim
262	Dr. Mohammed Afiat	Assistant Surgeon	Doctor	Unknown	M.B.		Muslim
263	Mirza Mohammed Afzal	Record Keeper D.I.G Office	I.C.S	Lahore			Muslim
264	M. Mohammed Afzal Khan	Munsif	Judge	Lyallpur			Muslim
265	Khan Mohammed Akber Khan	Sessions Judge	Judge	Bannu			Muslim
266	K.S. Raja Mohammed Akram Khan	E.A.C	I.C.S	Sialkot		K.S.	Muslim
267	Dr. S. Mohammed Ali	Asst Surgeon	Doctor	Gojra			Muslim
268	Dr. Mohammed Alam	Principal National Muslim University	University Teacher	Aligarh	B.A., L.L.D		Muslim
269	Mr. Mohammed Bashir	Nicholson Road	Unknown	Lahore			Muslim
270	Sirdar Khan Mohammed Atta-Ullah Khan	Retired Sub Judge	Retired Judge	Karnal			Muslim
271	Malik Mohammed Din	Timber Merchant	Timber Merchant	Lahore			Muslim
272	M. Dilawar Khan	E.A.C. Treasury Office	Govt. Officer	Bannu			Muslim
273	Sheikh Mohammed Hayat Khan	S.D.O	I.C.S	Jamrud			Muslim
274	Mian Mohammed Said	Supt. Of Police	I.C.S	Gurgaon			Muslim

275	S. Mohammed Shah	Zamindar	Reis	Lyallpur			Muslim
276	Haji Mohammed Sharif	Head Clerk P.W.D.	Clerk	Peshawar			Muslim
277	Sirdar Mohan Singh	Reis	Reis	Rawalpindi			Sikh
278	S.S. Malik Mohan Singh	President Municipality Committee	I.C.S	Rawalpindi			Sikh
279	Syed Mohsin Shah	Vakil High Court	Lawyer	Lahore			Muslim
280	Sirdar Khan Mohammed Hamid-Ullah Khan	Reis	Reis	Isakhel			Muslim
281	Mr. Mohammed Hussain	Director Dairy Syndicate	Businessman	Lahore			Muslim
282	Sh. Mohammed Hussain	Supt. Post Offices	I.C.S	Lyallpur			Muslim
283	Prof. Mohammed Shafi	V.P. Principal Oriental College	College Teacher	Lahore			Muslim
284	Mirza Mohammed Said	Asst Secretary Education Department	I.C.S		M.A., I.E.S.		Muslim
285	K.B. Syed Mohammed Shah	Supt. Of Police	I.C.S	Sind		K.B.	Muslim
286	K.S. Dr. Mohammed Sharif	Civil Surgeon	Doctor	Gujrat			Muslim
287	Dr. Mohindro Lal Syal	I.M.S. Asst. Surgeon	I.M.S, Doctor	Batala	B.Sc.		Hindu
288	Sirdar Mohindar Singh		Lawyer	Ludhiana	Bar-At-Law		Sikh
289	Sirdar Mohindar Singh	Bharat Building	Unknown	Lahore			Sikh
290	Mr. Mokand Lal		Lawyer	Lahore	M.A., Bar-At-Law		Hindu
291	Mrs. Mokand Kaur	Dr. Jai Singh And Sons	Housewife	Lahore			Hindu
292	Bhagat Mukand Lal	The Palms	The Palms	Lahore			Hindu
293	Lala Mooj Raj	Educational Representative, Messrs Macmillan And Co.	Businessman	Lahore	B.A., B.T.		Hindu
294	Pt. Murli Dhar	Head Clerk C&W Supt. Offices	Clerk	Lahore			Hindu
295	Dr. Mulk Raj Sawhney		Doctor	Lahore	M.B., L.R.C.P, M.R.C.S		Hindu
296	Bawa Mul Raj Bedi	I.M.S, P.M.S, Assistant Surgeon	I.M.S, Doctor	Gurdaspur			Hindu
297	Mr. Murari Lal Batra		Lawyer	Sargodha	B.A., Bar-At-Law		Hindu
298	Mr. Nain Sukh Rai		Lawyer	Lyallpur	Bar-At-Law		Hindu
299	Mr. Nanak Chand Chopra		Lawyer	Lahore	Bar-At-Law		Hindu

300	Bhagat Nanak Chand		Unknown	Allahabad			Hindu
301	Diwan Nanak Chand	Consulting Industrial Engineer	Engineer	Lahore	S.B. (MIT)		Hindu
302	Lala Nanak Chand Bhalla	Timber Merchant	Timber Merchant	Wazirabad			Hindu
303	R.B. Pt. Nand Lal Kaul	Asst Political Agent	Political Agent	Bundelkhund Nowgang (C.I)	I.S.O	R.B.	Hindu
304	Pt. Nand Lal Hakku	Jailer	Govt. Officer	Hisar			Hindu
305	Lala Nand Lal Puri	Agent Central Bank Of India Ltd.	Banker	Calcutta			Hindu
306	Lala Narain Das Juggi	Messrs. N.D. Juggi And Co. Merchants	Businessman	Rawalpindi			Hindu
307	R.B. Sirdar Narain Singh		Unknown	Dhera Dun		R.B.	Sikh
308	Bakhshi Narain Singh	House Master Chief's College	College Teacher	Lahore			Hindu
309	Ch. Narain Singh	Reis	Reis	Shujabad			Hindu
310	Sirdar Narain Singh	Milkhi Ram Road	Unknown	Lahore			Sikh
311	Raja Narendra Nath	D.B., M.L.C	I.C.S	Lahore			Hindu
312	Sirdar Narinder Singh	Munsif	Judge	Rupar	B.A.		Sikh
313	Lala Naranjan Lal	Manager State Bank	Banker	Bhatinda			Hindu
314	Lala Narayan Das Talwar	Post Master	I.C.S	Lyallpur			Hindu
315	R.B. Bawa Natha Singh	Under-Secretary Irrigation Department	I.C.S	Unknown		R.B	Sikh
316	Lala Nathu Ram	Head Clerk Civil Surgeon Office	Clerk	Lyallpur			Hindu
317	Lala Naunit Rai Ahuja	Pleader	Lawyer	Bannu			Hindu
318	Lala Nebh Raj Talwar	Wholesale Wine Merchant	Businessman	Bannu			Hindu
319	Mr. S. M. Niaz	S.D.O.	I.C.S	Panipat			Muslim
320	Sheikh Niaz Mohammed	Vakil High Court	Lawyer	Lahore			Muslim
321	Ch. Niaz Rasul Ahmed Khan	Jagirdar	Reis	Dhogri			Muslim
322	Sirdar Nidhan Singh Ahloowalia	Timber Merchant	Timber Merchant	Abbottabad			Sikh
323	Sirdar Bahadur Sirdar Nihal Singh	Judicial Minister	I.C.S Judge	Patiala		S.B.	Sikh
324	Mian Nizam-Ud-Din	Asst Engineer Khyber Railways	Engineer	Peshawar			Muslim

325	Sh. Nur Illahi	Inspector Of Schools	I.C.S	Multan	M.A.,		Muslim
326	S. Nur Mohammed Shah		Unknown	Abbottabad			Muslim
327	Sh. Nur Mohammed			Lyallpur	M.A., E.A.S.O.		Muslim
328	Lt-Col. J.W.Ottley	I.A.Officer Commanding XXIII	I.M.S	Unknown			British
329	R.S. Parma Nand		Lawyer	Abbottabad	Bar-At-Law	R.S.	Hindu
330	Mr. B.L. Pasricha	Engineer	Engineer	Kashmir			Hindu
331	Mr. M.L. Pasricha	Deputy Chief Engineer Telegraph	I.C.S	Calcutta			Hindu
332	Mrs. G.L. Phillips	Ferozepur Road	Unknown	Lahore			British
333	Mr. Pindi Dass	Public Prosecutor	Lawyer	Lahore			Hindu
334	Capt. J.N.Piplani	I.M.S.	I.M.S	Dera Ismail Khan			Hindu
335	Capt. Piyare Lal Tandon	I.M.S.	I.M.S	Dera Ghazi Khan			Hindu
336	Sardar Prab Singh	Executive Engineer	Engineer	Ludhiana			Sikh
337	Dr. Prem Nath Suri		Doctor	Lahore	M.B.		Hindu
338	Prof. Prem Chand	Govt. College	College Teacher	Lahore			Hindu
339	Lala Puran Chand	Nisbet Road	Unknown	Lahore			Hindu
340	Major M. L. Puri	I.M.S. Civil Surgeon	Doctor	Rawalpindi			Hindu
341	Messrs N.D. Radha Kishen And Sons		Businessman	Rawalpindi			Hindu
342	Lala Radha Kishen	Dy. Commissioner Income Tax	I.C.S	Ambala	P.C.S		Hindu
343	Lala Radha Lal	Engineer And Architect	Engineer	Lahore	C.E, A.M.I.C.E., M.R.S.I.		Hindu
344	Sirdar Raghbir Singh	Sub Engineer	Engineer	Ganda Singh Wala			Hindu
345	K.B. Munshi Rahim Bakhsh	District And Sessions Judge	I.C.S Judge	Ferozepur		K.B.	Sikh
346	R.S. Dr. Ram Chand	Civil Surgeon	Doctor	Hoshiarpur		R.S.	Hindu
347	Dr. Ram Chand	Sub Assistant Surgeon	Doctor	Bannu			Hindu
348	Lala Ram Lal Batra	Revenue Assistant	Govt. Officer	Ferozepur			Hindu
349	Lala Ram Ditta Mal Sehgal	Manager Lyallpur Bank	Banker	Bannu			Hindu
350	Diwan Ram Lal		Lawyer	Lahore	B.A., L.L.B.		Hindu

351	Dr. Ram Lal Talwar	Assistant Surgeon	Doctor	Fazilka			Hindu
352	Lala Ram Nath	Inspector Of Schools	I.C.S	Jullundur			Hindu
353	Pt. Ram Rakha	Pleader	Lawyer	Kasur			Hindu
354	R.B. Capt. Ram Rakha Mal Bhandari	Public Prosecutor	Lawyer	Hoshiarpur		R.B.	Hindu
355	R.B. Ram Rattan		Unknown	Gujrat		R.B.	Hindu
356	Lala Ram Sahai Jamna Das	Merchant Shahalmi Gate	Businessman	Lahore			Hindu
357	Ch. Rashid Mohammed Khan	Zaildar And Reis	Reis	Jahan Khelan			Muslim
358	Pt. Rattan Chand Bhargava	Agent Alliance Bank Of Simla Ltd.	Banker	Lyallpur			Hindu
359	Lala Rattan Chand Chopra	Terminal Tax Supt	I.C.S	Amritsar			Hindu
360	Ch. Roshan Din	S.D.O. Military Works	I.C.S	Parachinar			Muslim
361	Prof. Ruchi Ram Sahni		College Teacher	Lahore	M.A.		Hindu
362	R.S. Ch. Ruchi Ram	Contractor	Contractor	Dera Ismail Khan		R.S.	Hindu
363	Sheikh Rukn-Ud-Din	Senior Sub Judge	Judge	Sargodha			Muslim
364	Lala Rup Narayan	Pleader	Lawyer	Leiah	B.A., L.L.B.		Hindu
365	Mr. B.R. Sahni	Garrison Engineer	Engineer	Karachi			Hindu
366	Sayad Said Mohammed Shah	Zamindar	Reis	Lyallpur			Muslim
367	Rai Sant Ram	Executive Engineer	Engineer	Lahore			Hindu
368	Diwan Sant Ram		Lawyer	Gurdaspur	Bar-At-Law		Hindu
369	Lala Sant Ram Sawaya Mal	Merchant	Businessman	Lahore			Hindu
370	Sirdar Sant Singh Ahluwalia	Camp Clerk Supt Engineers Office	Clerk	Rawalpindi			Sikh
371	Sardar Sant Singh	Vakil High Court	Lawyer	Sialkot			Sikh
372	Pt. K. Satanam		Pandit	Lahore			Hindu
373	Lala Sarab Dial	Contractor	Contractor	Miani			Hindu
374	Lala Saral Jung Kohli	Sat Updesh Office	Govt. Officer	Lahore			Hindu
375	Miss Sarya Begum	Rattigan Road	Housewife	Lahore			Muslim
376	Mr. P.D. Sethi	Manager Karnani Industrial Bank Ltd.	Banker	Calcutta			Hindu

377	Mr. P.D. Sethi	S.D.O.	I.C.S	Mian Channu			Hindu
378	Prof. Sewa Ram Suri	P.W. College	College Teacher	Jammu			Hindu
379	R.B. Sewak Ram	M.L.C	I.C.S	Ganagpur		R.B	Hindu
380	Sirdar Sewaram Singh	District And Sessions Judge	Judge	Ludhiana			Sikh
381	Sir Shadi Lal	Chief Justice High Court	I.C.S Judge	Lahore		Sir	Hindu
382	Malik Shah Din	Timber Merchant	Timber Merchant	Lahore			Muslim
383	Mr. Sham Dass	I.C.G	I.C.S	Multan			Hindu
384	Pt. Sham Lal	Senior Supt Punjab Irrigation Secretariat	I.C.S	Lahore			Hindu
385	Lala Shambhoo Lal Puri	Vakil	Lawyer	Sargodha	B.A., L.L.B		Hindu
386	Dr. Sham Lal	Sub Assistant Surgeon	Doctor	Gojra			Hindu
387	Mr. D.L. Sharma	Messrs Norernac And Co.	Businessman	Lahore			Hindu
388	Prof. Shiv Dyal	Govt College	College Teacher	Lahore			Hindu
389	Lala Shiv Dyal	Retired Inspector Of Schools	Retired I.C.S	Lahore			Hindu
390	Dr. Shiv Dyal	Asst To Chief Malaria Medical Officer	Doctor	Lahore			Hindu
391	R.S. Shiv Narain	Public Prosecutor	Lawyer	Ferozepur		R.S.	Hindu
392	Mr. M. Sleem	Public Prosecutor	Lawyer	Lahore			Muslim
393	Lal Shiv Das	Vakil	Lawyer	Montgomery			Hindu
394	Sirdar Shivdev Singh	Honorary Magistrate And Civil Judge	Judge	Sialkot			Hindu
395	Lala Shyam Lal Gorowala	Gorowala Farm	Businessman	Pachhar	B.A.		Hindu
396	K.B. Sh. Siraj-Ud-Din	Deputy Commissioner	I.C.S	Muzaffargarh		K.B.	Muslim
397	Khwaja Siraj Ud-Din	E.A.C	Govt. Officer	Ambala			Muslim
398	Lala Sita Ram Kohli	Assistant Professor Govt College	College Teacher	Lahore			Hindu
399	Major N.S. Sodhi	I.M.S. Civil Surgeon	I.M.S, Doctor	Dalhousie			Hindu
400	Lala Sohan Lal Malhotra	Mill Owner	Businessman	Kasur			Hindu
401	Lala Sohan Lal Jaini	Proprieter Badridas Sohan Lal Bankers	Banker	Gujranwala			Hindu
402	Mr. K. Sorabjee	Fane Road		Lahore			Hindu

403	Pt. Sri Kishen	Senior Sub Judge	Judge	Gurdaspur			Hindu
404	Seth Sukh Deva		Unknown	Abbottabad			Hindu
405	Shahzada Sultan Asad Jan	E.J.A.C		Lahore			Muslim
406	Mr. Sunder Dass		Lawyer	Lahore	Bar-At-Law		Hindu
407	Lala Sunder Lal Chawla	Contractor	Contractor	Bannu			Hindu
408	Pir Taj-Ud-Din		Lawyer	Lahore	Bar-At-Law		Muslim
409	Lala Takhat Ram Chawla	Merchant	Businessman	Bannu			Hindu
410	Mr. M.L.Tannon	Principal Sydenham College Of Commerce	College Teacher	Bombay			Hindu
411	Lala Tara Chand Tandon	Telegraph Master	I.C.S	Lahore			Hindu
412	Malik Teja Singh	Executive Engineer	Engineer	Delhi			Sikh
413	R.B. Tej Ram	Engineer	I.C.S Engineer	Lahore		R.B.	Hindu
414	Diwan Tek Chand	Commissioner	I.C.S	Ambala	O.B.E., I.C.S.		Hindu
415	Lala Thakar Dass	Timber Merchant	Timber Merchant	Jhelum			Hindu
416	Mrs. Thakar Dass Chopra	Lohari Mandi	Housewife	Lahore			Hindu
417	Sirdar Thakar Singh	Handling Inspector	I.C.S	Unknown			Sikh
418	Sirdar Thakar Singh	Tahsildar	Govt. Officer	Ludhiana			Sikh
419	R.B. K. B. Thapppar			Lahore		R.B.	Hindu
420	Mr. A. C. Thukral			Lahore			Hindu
421	Lala Trilok Chand	18 Gowalmandi	Businessman	Lahore			Hindu
422	Mr. B. L. Uppal	Executive Engineer	Engineer	Rohtak			Hindu
423	R. B. B. P. Varma	Superintending Engineer	I.C.S	Lyallpur		R.B	Hindu
424	Mr. D. C. Varma	Asst. Engineer	Engineer	Khanewal			Hindu
425	Mr. K. C. Vidyarthi	P.A. To L. Harkishen Lal Minister For Agriculture	Govt. Officer	Lahore			Hindu
426	Capt. Vidya Bhushan	I.M.S.	I.M.S				Hindu
427	Sirdar Ujjal Singh	Factory Proprietor	Businessman	Mian Channu			Sikh
428	Lala Wanti Ram Chawla	Merchant	Businessman	Bannu			Hindu

429	Capt. Rattan C. Watts	M.D. , I.M.S.	I.M.S, Doctor	Abbottabad			British
430	Rai Bahadur Wazir Chand Chopra	Supt. Engineer	Engineer	Amritsar			Hindu
431	Sir Wazir Chand	Director Of Sericulture	I.C.S	Patiala		Sir	Hindu
432	Lala Wir Bhan Gandhi	Supt. A. G. Office	Govt. Officer	Lahore			Hindu
433	K.B. Mirza Zafar Ali	District And Sessions Judge	I.C.S Judge	Lyallpur		K.B.	Muslim
434	Ch. Zafar Hussain Khan	Asst. D.T.S	Govt. Officer	Sukkur			Muslim
435	Ch. Zafarullah Khan		Lawyer	Lahore	Bar-At-Law		Muslim
436	Mr. Devi Dayal		Lawyer	Lahore	Bar-At-Law		Hindu
437	Lala Hans Raj	Military Finance Department	Military Civilian	Simla			Hindu
438	Lala Hans Raj Batra	Gowalmandi	Businessman	Lahore			Hindu
439	Mr. E. R. Jivanandam	Jail Road	Unknown	Lahore			Hindu